



AREA-WIDE SANITATION OVERVIEW AND EVIDENCE GAPS

APRIL 2023

This report is made possible by the support of the American People through the United States Agency for International Development (USAID). The author's views expressed in this report do not necessarily reflect the views of USAID or the United States Government.

ACKNOWLEDGMENTS

This desk review was prepared by IDinsight and Tetra Tech. Crystal Huang and Steven Walker (IDinsight) oversaw the analysis, with essential participation from Adrian Brillantes-Stepper (IDinsight) and Carolien van der Voorden (Tetra Tech).

The authors would like to thank and acknowledge the following individuals for their valuable input and thoughtful contributions: Morris Israel and Lucia Henry (Tetra Tech); Estelle Plat and Chau Huang (IDinsight); Andy Robinson, Mimi Jenkins, and Antoinette Kome (SNV); as well as Jesse Shapiro (USAID), Michael Gnilo and Bisi Agberemi (UNICEF), Jamie Myers (Sanitation Learning Hub), Aditi Krishna (IRIS Group), and Ken Caplan for their peer review and insightful suggestions.

Authors: Crystal Huang, Steven Walker, Adrian Brillantes-Stepper, Carolien van der Voorden

Preferred citation: USAID. 2023. *Area-wide Sanitation: Overview and Evidence Gaps*. Washington, DC, USAID Water, Sanitation, and Hygiene Partnerships and Learning for Sustainability (WASHPaLS) #2 Activity.

Cover photo credit: FSG

Prepared for the United States Agency for International Development by the Water, Sanitation, and Hygiene Partnerships and Learning for Sustainability (WASHPaLS) #2 Project, contract number 7200AA21C00079.

Tetra Tech Contacts: Morris Israel, Chief of Party
morris.israel@tetratech.com

Carolien van der Voorden, Deputy Chief of Party
c.vandervoorden@tetratech.com

Lucia Henry, Project Manager
lucia.henry@tetratech.com

Tetra Tech
1320 N. Courthouse Road, Suite 600, Arlington VA 22201
Tel: 703-387-2100 Fax: 703-414-5593
www.globalwaters.org/washpals-2

TABLE OF CONTENTS

ACRONYMS	iii
PREFACE	v
EXECUTIVE SUMMARY	vi
1.0 INTRODUCTION	1
2.0 BACKGROUND ON RURAL SANITATION APPROACHES	5
2.1 A Summary of Current and Past Approaches to Sanitation	5
2.2 Addressing Safe Containment and Management	8
3.0 DEFINING AREA-WIDE SANITATION	10
3.1 What is Area-wide Sanitation?	10
3.2 Early Models of AWS	15
3.2.1 ODF Planning	15
3.2.2 Planning Beyond ODF	17
3.2.3 City-wide Inclusive Sanitation	18
4.0 A REVIEW OF AWS FRAMEWORKS	20
5.0 IMPLEMENTATION OF AREA-WIDE PROGRAMMING	25
5.1 Area-wide Approaches applied by Development Partners	25
5.2 Area-wide Approaches by Governments	26
6.0 CORE COMPONENTS OF AWS	31
6.1 The Enabling Environment and System Strengthening	31
6.1.1 National and Subnational System Building Blocks of AWS	32
6.1.2 Crosscutting Processes	34
6.1.3 Identified Knowledge Gaps	35
6.2 Interventions Under an AWS Framework	36
6.3 Developing a Theory of Change for AWS	37
7.0 KEY TAKEAWAYS AND AVENUES FOR FUTURE RESEARCH	40
7.1 Key Takeaways	40
7.2 Priority Areas of Future Research	41
REFERENCES	43
ANNEX A. AREA-WIDE APPROACHES BY DEVELOPMENT PARTNERS	55
ANNEX B. AREA-WIDE APPROACHES BY GOVERNMENTS	59

LIST OF TABLES

Table 1: UNICEF-WHO JMP Sanitation and Hygiene Service Levels 10
Table 2: Principles for City-wide Inclusive Sanitation 19
Table 3: Frameworks of Area-wide Sanitation 21
Table 4: Comparative System Frameworks 31
Table 5: Summary of Knowledge Gaps Linked to Systems and Processes 35
Table 6: Characteristics of Area-wide Approaches in Practice 55
Table 7: National and Local Government Area-wide Programming 59

LIST OF FIGURES

Figure 1: Draft ToC for AWS 38

ACRONYMS

AMCOW	African Ministers' Council on Water
AWS	Area-Wide Sanitation
BCC	Behavior Change Communication
CLTS	Community-Led Total Sanitation
CWIS	City-Wide Inclusive Sanitation
DP	Development Partner
EQND	Equality and Non-Discrimination
FSM	Fecal Sludge Management
GESI	Gender Equality and Social Inclusion
GLAAS	Global Analysis and Assessment of Sanitation and Drinking-Water
GRB	Gender Responsive Budgeting
GSF	Global Sanitation Fund
HR	Human Resources
HRTS	Human Right to Sanitation
IDS	Institute of Development Studies
IEC	Information, Education, and Communication
JMP	Joint Monitoring Programme
KII	Key Informant Interview
LGU	Local Government Unit
LMIC	Low- and Middle-Income Countries
LNOB	Leave No One Behind
M&E	Monitoring and Evaluation
MBS	Market-Based Sanitation
MEL	Monitoring, Evaluation, and Learning
MHM	Menstrual Hygiene Management
NDP II	Second National Development Plan
NDP III	Third National Development Plan
NGO	Nongovernmental Organization
NPCWSSS	National Program for Community Water Supply and Sanitation Services
NRWSSP II	National Rural Water Supply Sanitation Programme - Phase 2

OD	Open Defecation
ODF	Open Defecation Free
PAMSIMAS	<i>Penyediaan Air Minum dan Sanitasi Berbasis Masyarakat</i> (Third Water and Sanitation for Low Income Communities Project)
PhATSS	Philippines Approach to Sustainable Sanitation
SBC	Social and Behavior Change
SBMG	<i>Swachh Bharat Mission Grameen</i>
SDG	Sustainable Development Goal
SMSS	Safely Managed Sanitation Services
SSH4A	Sustainable Sanitation and Hygiene for All
STBM	<i>Sanitasi Total Berbasis Masyarakat</i>
SWA	Sanitation and Water for All
ToC	Theory of Change
TSSM	Total Sanitation and Sanitation Marketing
UN	United Nations
UNICEF	United Nations Children’s Fund
USAID	United States Agency for International Development
WASH	Water, Sanitation, and Hygiene
WASHPaLS	Water, Sanitation, and Hygiene Partnerships and Learning for Sustainability
WHO	World Health Organization
WSP	Water and Sanitation Program
WSSCC	Water Supply and Sanitation Collaborative Council

PREFACE

The United States Agency for International Development (USAID) Water, Sanitation, and Hygiene Partnership and Learning for Sustainability (WASHPaLS) #2 Activity is a five-year (2021–2026) activity implemented by Tetra Tech and partners. The project aims to strengthen USAID’s and partners’ water, sanitation, and hygiene (WASH) programming through support for learning and adoption of the evidence-based programmatic foundations needed to achieve sustainable development goal 6.2. The overarching theme for WASHPaLS #2 learning and research is area-wide sanitation (AWS). In addition to defining and seeking to understand effective implementation of AWS, WASHPaLS #2 implementation research also focuses on market-based sanitation (MBS) and social and behavior change (SBC) to reduce pathogen transmission pathways for infants and young children.

While at-scale rural sanitation and hygiene programming has been undertaken for decades, the concept of AWS is relatively new. Between May and October 2022, WASHPaLS #2 undertook extensive desk review and sought expert opinion to understand the genesis and gather evidence of effective AWS implementation and inform an overview of its core components. The objective was to contribute to sector understanding of AWS and to inform WASHPaLS #2 implementation research on the theme over the next years of the activity. This report presents WASHPaLS #2’s current understanding of AWS and will serve as the basis for continued learning.

EXECUTIVE SUMMARY

The last few decades have witnessed substantial gains in access to sanitation, as nearly 2.4 billion people gained access to improved toilets and open defecation (OD) rates fell 12 percentage-points globally (from 21% to 9%) between 2000 and 2020 (World Bank 2022; United Nations Children’s Fund [UNICEF]-World Health Organization [WHO] Joint Monitoring Programme [JMP] 2019). Despite this progress, many countries are off track to meet their sustainable development goal (SDG) 6.2 targets, with progressive improvement essential to achieve universal and sustainable access for all. To reach these targets by 2030, a concerted effort is needed to broaden, combine, and strengthen existing approaches throughout the sector.

One possible response to this is area-wide sanitation (AWS), a systems-based, outcome-driven framework to achieve equitable, universal access and use of safely managed sanitation and hygiene in a given administrative area, such as a district. The focus of AWS is on predominantly rural administrative areas, characterized by a mix of small towns/peri-urban communities with mixed rural and urban characteristics, rural on-road, and rural remote areas, as described in the 2019 Guidance on Programming for Rural Sanitation (WaterAid 2019). While recognizing that, given context and different starting points, area-wide coverage targets may initially be set at achieving ODF or universal basic sanitation, the end goal of AWS is achieving universal access to safely managed sanitation services (SMSS). The hypothesized benefits of an area-wide framework include greater leadership by local governments, alignment of stakeholders and resources, prioritization of equity and inclusion, and improved sanitation outcomes for all, but AWS has not yet been subject to a thorough review in the literature.

The purpose of this desk review is to collate the definitions and frameworks developed for AWS and examine how AWS programming has been implemented in practice. The aim is to arrive at a common definition of AWS, identify its core components, and develop a high-level theory of change (ToC) for how these components are structured.

SELECTED KEY FINDINGS

At their core, area-wide programs are deliberately equitable and inclusive by seeking to ensure that everyone in an area can access and use sanitation and hygiene products and services at all times, rather than only a specific target population. This focus on universal and inclusive coverage goes beyond existing approaches and projectized practices (whether community-led total sanitation [CLTS], sanitation marketing, market-based sanitation [MBS], or others), which have often focused on selected population groups or specific geographies within a wider area or have been implemented in silos. AWS is a rights-based framework that implies focusing on inclusive planning and empowerment of all people to claim their rights; long-term systemic changes in attitudes, behavior, policies, and laws; the need to shift power dynamics; and lifting of barriers to participation and inclusion (WaterAid 2018).

AWS is a framework, rather than an approach. Under AWS, a variety of interventions, approaches, and stakeholders unite to support achieving the intended outcomes for the entire population within the designated area. In reviewing existing framework definitions for AWS, the United States Agency for International Development (USAID) Water, Sanitation, and Hygiene Partnership and Learning for Sustainability (WASHPaLS) #2 Activity review team presents four key principles that underpin AWS: operating at scale, aiming for universal inclusive coverage, prioritizing government leadership, and focusing on sustainability.

In practice, limited documentation exists on implementation of AWS by development partners (DPs) or governments. This review identified 11 relevant examples which were selected as cases that have been implemented at scale, incorporate integrated or tailored approaches/interventions, and possess at least one other key principle of AWS beyond scale (universal coverage, government

leadership, and/or sustainability). These include some cases targeting area- or nation-wide open defecation free (ODF) status. While the limited available documentation prevents an in-depth review of their implementation and effectiveness, the review team uses the review of these examples to inform the identification of the core components of AWS. The existing frameworks and AWS case studies highlight the national and subnational building blocks presumed to be needed to implement AWS, including, for example, sector policies and strategies, planning and financing, institutional arrangements, capacity strengthening, and monitoring, evaluation and learning (MEL). They also identify the mix of necessary sanitation and hygiene interventions, and describe system strengthening, adaptive management, and gender equality and social inclusion (GESI) mainstreaming as cross cutting processes required for strengthening intervention and service delivery efforts.

The review team compiled these core components into a draft ToC that connects them to the intended outcomes of AWS of achieving universal access to SMSS. This draft ToC visualizes the main elements of the AWS framework and is intended as a reference for further dialogue and research into AWS implementation. Although these components support a preliminary (but not necessarily exhaustive) construction of the AWS framework, the largest gaps remain around the lack of documentation of area-wide programs in practice, including how these components are to be implemented, particularly in rural areas and under resource-constrained governments.

AREAS FOR FURTHER RESEARCH

In theory, the objective of AWS is to equitably move all households to higher levels of sanitation service as quickly as possible. But **the benefits of AWS remain largely hypothetical** as the “how” of doing so across contexts—whether to implement interventions in a phased or parallel approach, how to ensure sustained service provision, and which target populations to reach first—remains a key outstanding question in operationalization. The knowledge and evidence gaps highlighted in this desk review reveal a key set of areas where further research could inform the sector’s understanding of AWS, namely in monitoring and evaluation (M&E) and adaptive management, better planning for safe containment and management of human waste, and how to best achieve equity objectives.

1.0 INTRODUCTION

The last few decades have witnessed substantial gains in access to sanitation, as nearly 2.4 billion people gained access to improved toilets and open defecation (OD) rates fell 12 percentage-points globally (from 21% to 9%) between 2000 and 2020 (World Bank 2022; United Nations Children’s Fund [UNICEF]-World Health Organization [WHO] Joint Monitoring Programme [JMP] 2019). Despite notable gains, an estimated 1.2 billion people remain without basic sanitation services¹ and over 3.6 billion people lack access to safely managed sanitation services (SMSS)² (UNICEF-WHO JMP 2021). Of this number, over one billion either have limited access to sanitation services or are still using unimproved latrines, most of whom live in rural areas (UNICEF-WHO JMP 2021). In 2020, 92% of the population still practicing OD lived in rural areas (UNICEF-WHO JMP 2021). Although rural communities have realized gains in sanitation access, with the reported percentage of people utilizing SMSS increasing from 36% to 44% between 2015 and 2020, coverage of SMSS is still 18 percentage points lower than for urban areas (62%). Monitoring of and reporting on SMSS is also lagging, with only 120 countries having estimates on safely managed services (UNICEF-WHO JMP 2021).

The slower pace of progress in rural sanitation and the high pace of population growth means that low- and middle-income countries (LMIC) are off track in reaching their sanitation targets. This stands in stark contrast to the normative direction provided to countries by the Human Right to Sanitation (HRTS), adopted by the United Nations (UN) in 2010 (adopted jointly with water, and later in 2015 as a standalone right), and by the Leave No One Behind (LNOB) agenda embodied in the sustainable development goals (SDGs). SDG 6.2 aims to, “by 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations” (WHO 2018, 11; UN n.d.b.). According to the UN, the current pace of progress must quadruple for countries to achieve universal access to sanitation and hygiene laid out under Goal 6 (UN Water 2021). For rural, vulnerable, and disadvantaged populations where the burdens of disease from OD and unsafe sanitation are higher, an even faster pace is needed.

This urgency to improve the coverage, equity, and sustainability of sanitation approaches coincides with broader shifts in the water, sanitation, and hygiene (WASH) sector. The HRTS entitles everyone access to sanitation services that provide privacy, ensure dignity, and are physically accessible; to ensure that right, these services should be affordable, safe, hygienic, secure, and socially and culturally acceptable. Previously, WASH programming was predominantly needs-based, in which marginalized populations were often treated as passive beneficiaries of top-down development interventions. In a rights-based approach, all community members possess the same right to sanitation, and vulnerable populations are treated with dignity, consent, and respect in overcoming barriers to access. These key rights must be underpinned by principles of non-discrimination and equality, participation, the right to information, accountability, and sustainability (WHO 2018). However, past approaches to sanitation, where supply-side and demand-side, hardware-oriented and behavior-oriented, and program delivery and system strengthening approaches have been tested and retested, show that no magic bullet exists in securing universal access for all. Lessons to date have led development partners (DPs), practitioners, sector experts, and governments to look for new approaches to sanitation that

¹ Defined as the use of improved facilities that are not shared with other households, where improved sanitation facilities are those designed to hygienically separate excreta from human contact, including flush/pour flush toilets connected to piped sewer systems, septic tanks or pit latrines with slabs (including ventilated improved pit latrines), and composting toilets (WHO-UNICEF JMP 2021).

² Defined as the “use of improved facilities that are not shared with other households and where excreta are safely disposed of in situ or removed and treated offsite” (WHO-UNICEF JMP 2021).

they can learn from and scale promising approaches, improve collaboration and cross-sector governance, and put equity and inclusion at the forefront of policymaking (WaterAid 2019).

Over the last two decades, a growing body of research and significant advocacy efforts re-envisioned sanitation programming as moving away from individual interventions toward a system strengthening approach (Trancón, Boulenouar, and Tillett 2021; UNICEF 2016c). This shift moves away from singular supply- or demand-driven approaches toward one of sanitation service delivery and systems strengthening to achieve universal access to SMSS that encompasses the safe containment, removal, transport, treatment, and disposal or reuse of human excreta from the environment (Robinson and Peal 2020). For safe containment, many rural communities still lack access to even basic sanitation and require interventions to eliminate OD and improve toilet ownership and quality. However, increased ownership of on-site latrine models in many rural and peri-urban areas means that solutions for emptying, transport, treatment, and disposal/reuse (i.e., fecal sludge management [FSM]) have become increasingly necessary, particularly in those contexts where rural pit latrines cannot be safely abandoned when full (Robinson and Peal 2020). This diversity in needs along the sanitation service chain requires an equally diverse set of approaches customized to individual communities and incorporating post- open defecation free (ODF) strategies as and when communities improve access to sanitation services.

To reach the SDG 6 targets of universal and equitable sanitation access by 2030, a concerted effort is needed to broaden, combine, and strengthen existing approaches utilized throughout the sector (WaterAid 2019). One possible response to this is area-wide sanitation (AWS). By name, area-wide programming suggests that sanitation and hygiene programming is applied across a given administrative area, such as a district (WaterAid 2019; World Bank 2019), with the overall aim of ensuring access to and use of sanitation services and key hygiene behaviors for everyone within that area. The main benefit of AWS is that it forces governments and implementers to start thinking about and planning, from the beginning, how best to reach all people and communities, including those in more challenging contexts or who face specific barriers to adequate sanitation and hygiene. Under a rights-based approach, this implies focusing on inclusive planning and empowerment of all people to claim their rights; long-term systemic changes in attitudes, behaviors, policies, and laws; the need to shift power dynamics; and removing barriers to participation and inclusion (WaterAid 2018). Otherwise, status-quo approaches can lead to the adoption of a trickle-down approach, which operates in the easiest environments first (i.e., low-hanging fruit) and neglects those most affected by inadequate sanitation and hygiene. Those typically neglected tend to be the poorest, most marginalized, and those who live in the most challenging contexts—all of these people are often missed in programs that do not use an area-wide, inclusive framework.

By focusing on the goal of universal area-wide access, AWS has important implications for how sanitation policies, strategies, programs, and targets are defined, implemented, and evaluated (SNV 2019a; United States Agency for International Development [USAID] 2020; Tillett and Smits 2017). AWS not only instills a much more conscious framework to ensuring equity and inclusion, but it also shifts the emphasis from a projectized to a local government-driven approach that strengthens local systems. Examples of area-wide frameworks include the drive for area-wide ODF achievement at the district or county level (e.g., Bangladesh, Nigeria, Indonesia) (Hanchett 2016; UNICEF 2016a; Mukherjee 2009). Area-wide frameworks also have been adopted in urban areas through initiatives such as city-wide inclusive sanitation (CWIS), a sanitation framework focused on achieving universal access through greater adaptability of interventions, integration of programming, and coordination across stakeholders (Gambrill, Gilsdorf, and Kotwal 2020; Asian Development Bank [ADB] 2021; Hueso 2017). Some country governments, such as Uganda and Kenya, are also implementing area-wide frameworks in their respective sanitation planning for urban areas (Uganda) and entire counties (Kenya) (Republic of Kenya 2019; Kampala Capital City Authority 2019).

However, AWS is a relatively new concept; it has not yet been subject to a thorough review in the literature and in practice has been implemented under a diverse array of frameworks and approaches. While several framework definitions for AWS exist, those that do vary across organizations and implementing partners, each suited to a different construction of what factors are deemed needed to achieve universal access to sanitation (Tillett and Smits 2017; WaterAid 2019; USAID 2020; World Bank 2019; SNV 2019a). For governments drafting area-wide plans and policies, many are tied to different outcomes (e.g., ranging from achieving ODF to SMSS) and at different scales, all while utilizing similar principles of scale, equity, universal coverage, government ownership, impact, and sustainability (Government of the Republic of Malawi 2018; Government of the Republic of Zambia 2019a; Keesiga 2018; Kabarole District Local Government 2018). Additionally, the core components that drive AWS and how those compare to other sector frameworks that are devoted to strengthening WASH systems (UNICEF 2016b), fostering greater sustainability (WASH Alliance FIETS model), or models to improve service delivery and equity (Sanitation and Water for All [SWA] Collaborative Behaviors and Building Blocks [SWA n.d.a.; SWA n.d.b.]) have not been clearly defined.

The purpose of this desk review, conducted by the USAID Water, Sanitation, and Hygiene Partnership and Learning for Sustainability (WASHPaLS) #2 Activity review team, is to collate the definitions and frameworks previously developed for AWS and examine how past AWS frameworks have been implemented in practice. The aim is to consolidate a working definition of AWS, identify the core components, develop a high-level theory of change (ToC) for how these components and associated AWS interventions are structured, and inform future AWS-related learning priorities. While this desk review is not meant to serve as detailed guidelines for specific programming or contexts, it does present relevant thematic insights from available literature based on previous implementation of interventions operating under an area-wide framework.

The remainder of this desk review is structured as follows: Section 2 provides an overview of past sanitation programming in rural areas and sector trends that led to the development of an area-wide framework for rural sanitation; Section 3 defines AWS, intended outcomes, and hypothesized benefits; Section 4 collates existing framework definitions for AWS used across organizations and governments and identifies the key principles behind AWS; Section 5 reviews examples of area-wide interventions implemented by DPs and country and local governments and provides an overview of their programming characteristics; Section 6 outlines the core components of AWS and builds a high-level ToC connecting the key principles, core components, interventions, and outcomes defined in previous sections; Section 7 presents key takeaways from the desk review and suggested areas for future research to overcome some of the identified challenges in implementing AWS.

METHODOLOGY FOR THE DESK REVIEW

This desk review has five objectives: 1) construct a working definition of AWS, 2) collate the area-wide frameworks that exist for sanitation, 3) identify interventions by implementing organizations and country governments that have applied area-wide frameworks, 4) identify the core components of AWS and construct a high-level ToC for this systems-based framework to sanitation, and 5) identify evidence gaps related to the AWS core components, ToC, and effective implementation of an area-wide framework to sanitation and hygiene.

To achieve these objectives, the review team compiled a collection of literature sourced from DPs, implementing organizations, WASH-focused organizations and resource repositories, and official government documents. This literature is a mix of evidence on processes (process and formative evaluations), case studies, systematic reviews, reports, other gray literature, and academic journal articles. The review of this literature was informed and supplemented by key informant interviews (KIs) with sanitation experts. These interviews were used to inform and validate areas of research under AWS and provide context on how changes in area-wide frameworks developed over time (and that are not often codified in the literature).

The literature search initiated with the first objective of identifying definitions and frameworks from international organizations, DPs, and WASH-sector consortiums that specifically mentioned “area-wide sanitation,” “area-wide programming,” or followed a broad definition of operating at the level of an administrative area to cover all those within that area.³ From the literature search and interview process, the review team identified five relevant area-wide frameworks (Section 4).

The team then reviewed prominent sanitation programs and interventions from various implementing organizations, DPs, and country governments that have been implemented at scale and incorporate some of the core tenants of AWS identified from the available definitions. For implementing organizations and DPs (collectively referred to as “development partners”), programs that have been implemented under an area-wide framework were largely identified through KIs and then examined against some of the guiding principles of AWS. These principles were suggested by the sanitation experts the team consulted, namely scale, equity, sustainability, local government led, universality, monitoring and evaluation (M&E), and adaptive management. For country governments using area-wide frameworks, the team assessed countries on their level of decentralization in sanitation programming to subnational levels of government, whereby sanitation programs and interventions may be designed at a country, district, and/or provincial level. From the literature search and interview process, the team identified a non-exhaustive list of three relevant case studies from DPs and eight relevant countries that have sufficient documentation of area-wide implementation (Section 5).

The team used the framework definitions available in the literature and experiences of area-wide interventions by DPs and governments to then assemble a hypothesized set of core components under AWS (Section 6). To do so, the team also analyzed the main pillars of existing sanitation-sector frameworks that align with the goals of AWS and used all the above information to develop a draft ToC for AWS. The ToC presents a high-level, hypothesized visualization of the integration of the systems-level building blocks and specific sanitation interventions under AWS and how these relate to one another and to the intended outcomes of AWS (although the specific causal pathways of change are not yet mapped out).

The findings from the desk review should not be considered mutually exclusive and collectively exhaustive. As a systems-based framework for sanitation, AWS contains many components that can be interpreted and formatted under a different construction than what the review team proposes. Likewise, the research and case studies included represent a thorough but preliminary review of the literature and should not be viewed as a collective body of area-wide interventions, particularly due to the limited available documentation around AWS. Lastly, this desk review should be viewed as a living document that can be updated as more experience, research, and learning occurs.

³ The review team excludes urban-specific frameworks for AWS, such as CWIS, from the analysis. Although CWIS is mentioned for reference to applying sanitation approaches at scale, this desk review focuses on frameworks that are relevant across broader geographies that will include rural and remote areas and small towns.

2.0 BACKGROUND ON RURAL SANITATION APPROACHES

2.1 A SUMMARY OF CURRENT AND PAST APPROACHES TO SANITATION

The majority of sanitation interventions before the 2000s approached challenges to sanitation access primarily as an infrastructure problem. Most rural interventions consisted of supply-driven programming providing low-cost sanitation hardware that often failed to account for the operational or maintenance needs from long-term use (Jenkins and Sugden 2006; Brown 1992). Such supply-driven interventions did not address the behavioral barriers that depressed demand for usage and upkeep of toilets and were only infrequently accompanied by health-focused promotion components (Jenkins and Sugden 2006). Without sufficient demand, incentives for latrine ownership were low as households expected free sanitation materials, and norms in many communities had not yet shifted to outwardly oppose OD or encourage independent adoption of toilets (iDE 2016). In the 1990s, the concepts of “demand-driven,” “people-centered,” or “bottom-up” approaches became more engrained, and participatory approaches to sanitation and hygiene promotion, such as participatory hygiene and sanitation transformation and community health clubs, became more widely used (Evans, van der Voorden, and Peal 2009). Promotion of sanitation also shifted from a health and hygiene focus to the usability benefits of comfort, privacy, convenience, and safety (Jenkins and Sugden 2006). Nonetheless, progress in increasing rural coverage was slow. In 1999, the introduction of community-led total sanitation (CLTS) in Bangladesh introduced a new paradigm and a radical way of looking at sanitation. CLTS made use of the near universal disgust associated with human excreta to provoke urgent and collective local action to become ODF; it also introduced the concepts of “total sanitation,” requiring that everyone in the community have access to and use sanitation facilities to tangibly reap the benefits of a clean environment. Through the principle of “community problems, community solutions”, CLTS delivered a hands-off approach by facilitators coupled with collective responsibility and community empowerment to improve sanitation (Kar and Chambers 2008).

CLTS emerged as an approach focused on behavior change to end OD practices and trigger demand for community sanitation. Specifically crafted for rural areas, CLTS programming quickly became one of the most deployed sanitation interventions globally (Venkataramanan et al. 2018). CLTS has led to notable OD reductions in the communities in which it has been implemented, but gains in OD reduction and elimination have not been universal and slippage (where communities that were certified ODF revert to OD practices) remains an acknowledged concern (Jerneck, van der Voorden, and Rudholm 2016; Hickling 2019; USAID 2018a).⁴ CLTS, with its focus on reaching the entire community and on intra-community support, is by design one of the most inclusive approaches used at scale in the sector and evaluations have pointed to disadvantaged people in CLTS-intervention communities expressing benefits related to safety, convenience, ease of use, self-esteem, health, dignity, improved environment, and income generation, beyond gaining access to sanitation facilities (House, Cavill, and Ferron 2017). But it is also clear that CLTS is not automatically inclusive of disadvantaged people and that they are not proactively considered at the forefront of implementation (House, Cavill, and Ferron 2017). Studies also show that CLTS can reinforce inequitable gender dynamics and exclude marginalized groups when considerations for gender and equity are not explicitly considered in program design (Roose, Rankin, and Cavill 2015; Davis 2016).

The onset of CLTS and its “no-hardware subsidy policy” provided a viable alternative and a promise to a more inclusive way of programming that targeted “total” coverage, rather

⁴ Reasons for the occurrence of slippage range from poor households predominantly investing in low-quality latrines to factors including seasonal weather patterns, community in-and-out migration, soil quality, or insufficient post-program support (Myers and Gnilo 2017). These factors impact the success of CLTS, with previous studies identifying slippage rates in post-ODF communities between 15% and up to 100% in cases across Africa (Stuart et al. 2021).

than reaching only selected households, as was the case in other sanitation interventions (Kar and Chambers 2008). Yet, subsidies can be a particularly versatile tool to implement and have been leveraged by governments and programs in a variety of contexts to reach poor households (Andres et al. 2019). **Sanitation subsidies can alleviate income and liquidity constraints to purchasing or maintaining a toilet or sanitation product**—supporting households to access (partial) sanitation technologies such as slabs, cement rings, or entire toilets through a variety of financial support mechanisms (ranging from direct provision of hardware to various types of financial mechanisms such as provision of discounts, rebates, and vouchers) (Andres et al. 2019). However, evidence shows that these interventions can lead to mixed results in substantially reducing OD and improving sanitation services generally (Robinson 2005b; Evans, van der Voorden, and Peal 2009; Robinson and Gnilo 2016). Subsidy benefits often go to non-poor households (Robinson and Gnilo 2016) and can distort sanitation markets by weakening demand for household investments in toilets in addition to being an inefficient use of limited public resources that are often mismanaged (iDE 2019; Evans, van der Voorden, and Peal 2009; Andres et al. 2019). Development programs, including through direct provision or heavy subsidization of toilet goods, also severely disrupted or distorted local toilet supply chains or prices (UNICEF 2021).

Market-based sanitation (MBS) has seen a rise in popularity as a method to increase private sector engagement and develop sanitation markets in rural areas (Robertson 2019). Leveraging private sector actors, MBS programs often lead to investment in more durable toilets compared to CLTS and have had some success in catering to customers' needs and preferences, resulting in higher quality, safer, and better designed latrines. Results from previous studies show that MBS can increase toilet coverage, but it currently only reaches a modest percentage of households and few cases have been successfully scaled due to the contextualized nature of local sanitation markets and their enabling environments (USAID 2018b). On the benefits of MBS, evidence from rural Bangladesh where private sanitation businesses are prevalent shows that private sanitation purveyors were viewed as more responsive to customer needs, flexible with incremental payment methods, and offered a wider array of sanitation products compared with public manufacturers (Robinson and Paul 2000; Heierli and Frias 2007). In Cambodia, over 80% of latrines purchased by rural households were from private providers, exhibiting the reach that private actors can have and the role they can play in expanding sanitation access in rural areas⁵ (Pedi, Kov, and Smets 2012). However, existing factors including the price of sanitation products, liquidity of household or individual funds, and profitability of sanitation businesses have prevented the poorest and most marginalized households from meaningfully participating in the marketplace (USAID 2018b). The viability of market-based programming and sanitation services as a business model can vary across rural contexts, with the most successful examples found in Asia, while programs in sub-Saharan Africa have been less effective (USAID 2018b). A study in 2020 proposed several factors explaining this gap in outcome: in sub-Saharan Africa's relatively challenging business environment, notable challenges include higher costs of doing business, less developed infrastructure, and lower population density. Additionally, projects in sub-Saharan Africa had shorter average duration than those in Asia, depriving implementers of the time required to iterate their approach and develop locally relevant strategies (Agarwal et al. 2020).

CLTS and MBS are two approaches that illustrate how demand- and supply-side sanitation programming shifted in the last 20 years to improve access to and use of rural sanitation. However, their implementation as singular interventions is representative of the fragmentation that has existed within many past approaches (Venkataramanan 2017). Sector experts have noted the siloed nature of sub-sectors within the broader WASH sector (Narayan et al. 2021). This is further affected by

⁵ However, despite the high prevalence of private providers in Cambodia, their higher rates of private-sector involvement are unique due to several factors that make it an ideal context for sanitation marketing, including types of latrines preferred, cost of labor, and preference for non-community solutions (Andy Robinson, personal communication).

the highly project-driven nature of the sector, where DPs and international nongovernmental organizations (NGOs) have traditionally had a strong ability to influence programming approaches and interventions through the resources and support they make available, particularly in low-income countries that substantially lack financial and human resources (HR). As concluded in the 2022 UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) report, only 14% of 90 countries reported having sufficient funding to reach national targets for rural sanitation, and 78% of countries that require an acceleration to achieve their sanitation targets reported having less than 50% of the financial resources needed to implement national drinking-water and sanitation plans (WHO and UN Water 2022). Government partners are often keen to welcome programs and projects into their area, even if these programs implement different and sometimes contradictory approaches. Because such projects are always time-bound, they tend to contribute to a situation where interventions are started but abandoned, HR recruited and capacitated but then let go, and/or post-intervention follow-up is not guaranteed.

To address this fragmentation and the increasing connectivity between sanitation and other sectors, including health, nutrition, education, and gender equality, more recent initiatives place greater emphasis on combining sanitation approaches for greater impact.

The limitations in CLTS coverage and sustainability challenges, for example, have prompted further iterations of CLTS programming that involve the combination of interventions (e.g., the inclusion of subsidies and sanitation marketing, to increase coverage, improve latrine quality, and make CLTS more inclusive (Jones et al. 2016; USAID 2018a). For MBS, greater attention is given to the role of governments in establishing conducive business and enabling environments as well as national and local supply chains to support profitable sanitation enterprises (World Bank 2013b). In general, rural sanitation programs also invest more heavily in local system building. However, insufficient evidence exists on the most effective methods of combining interventions in different contexts, including which interventions may be most compatible and when and in what sequence they should be applied.

Sustainability of CLTS sanitation gains in rural areas, particularly in post-implementation and post-ODF contexts, remains an elusive goal (Wamera 2016). Slippage of ODF status threatens sustainability in post-CLTS communities as the low-durability toilets that CLTS programs often result in, degrade quickly and are more susceptible to natural disasters or unsuitable climate conditions (USAID 2018a; Robinson and Gnilo 2016; Crocker, Saywell, and Bartram 2017; USAID 2021c; Delaire et al. 2022). Long-term progress for behavior changes and habit formation around preventing OD is often non-linear, meaning that a high risk of reversion remains, particularly at the initial stages when new habits have not yet been fully formed⁶ (Jerneck, van der Voorden, and Rudholm 2016). This is particularly true for marginalized and vulnerable communities who face higher risks of slippage post-implementation compared to their non-vulnerable counterparts—an equity consideration that is inconsistently incorporated in program design and implementation (Myers and Gnilo 2017). To combat reversion and ensure sanitation gains are sustained, expectations of slippage need to be prioritized in policy designs and overall strategy to most effectively respond to and mitigate slippage when it occurs, rather than waiting for it to be identified (Myers and Gnilo 2017). To this end, and recognizing their broader aims beyond just mitigating slippage, Kenya, Nepal, the Philippines, Zambia, and other countries have established post-ODF strategies (with more under development) in government sanitation plans and frameworks (Robinson 2022; Government of Nepal 2011; Republic of the Philippines 2019; Government of the Republic of Zambia 2018). Through a focus on interventions such as MBS, FSM, social and behavior change (SBC), and/or system strengthening, these post-ODF plans provide a pathway for countries to gradually reach higher levels of sanitation service delivery toward

⁶ The risk of reversion is hypothesized to progressively decrease as positive sanitation habits are continuously formed and engrained within communities and households (Jerneck, van der Voorden, and Rudholm 2016).

SMSS. However, these post-ODF strategies often still lack the funding and prioritization to effectively mitigate slippage (Wamera 2016).

2.2 ADDRESSING SAFE CONTAINMENT AND MANAGEMENT

Beyond getting households to use improved toilets, few rural CLTS sanitation interventions have focused on whether toilets or other sanitation facilities adequately contain human excreta, or what happens to fecal sludge when pits or tanks fill up. Most national and program sanitation monitoring systems focus on checking whether households have access to an improved toilet rather than examining sanitation behavior and how sanitation services and user practices change over time (Khan et al. 2017). As a result, most large-scale rural sanitation programs fail to adequately address or monitor a number of important sanitation behaviors, including shared use of household toilets, safe child excreta disposal, safe excreta containment by household toilets, and FSM when toilet containment systems are closed, emptied, or replaced (Robinson and Peal 2020). More recent monitoring of the safe management of fecal waste, such as under SNV’s Sustainable Sanitation and Hygiene for All (SSH4A) program (SNV 2018), confirms that some improved sanitation systems do not safely contain excreta. In areas with high groundwater or flooding, or where pits fill quickly with liquid wastes, some surface outflows were reported from the pits of otherwise improved sanitation facilities. Septic tanks frequently exhibit unsafe surface outflows, particularly in low-income or congested areas, as these systems often lack the soak pits or absorption trenches required for effluent disposal into the soil (Kolsky, Fleming, and Bartram 2019).

Wastewater outflows from toilet containment systems raise significant concern as these outflows contain high pathogen loads, are rarely monitored, and are rarely safely managed (Robinson and Peal 2020). The limited pathogen removal achieved by even well-designed septic tanks means that septic tank effluent generally contains many thousands of “human infective doses” of helminth eggs, protozoa, viruses, and bacteria (Mitchell, Abey Suriya, and Ross 2016). Consequently, any surface outflows of fecal sludge or wastewater are hazardous, particularly when these outflows occur close to the house or in nearby areas that children or animals frequent. There is also a risk of groundwater contamination when the outflows from the latrine pit or septic tank are below ground and near groundwater supply (Robinson and Peal 2020; Ravenscroft et al. 2017). In both cases, closer monitoring of containment and emptying practices are critical, as are rapid and effective response mechanisms when monitoring detects unsafe practices.

A recent study examined the fecal pathogen load that was returned to the environment in four different settings (Ghana, Mozambique, Senegal, and Indonesia) and found that 50%–58% of the excreta was unsafely released, with the vast majority (80%–98%) of this unsafe release occurring close to the household (i.e., in the toilet interface, containment, or during emptying) (Kolsky, Fleming, and Bartram 2019). Importantly, the study found that the data on the unsafe return of excreta in these four LMICs suggested that dry pit latrines were safer than septic tank toilets, and septic tank toilets were safer than sewerage. A 2020 study of the use of SMSS in rural Global Sanitation Fund (GSF) programs (Robinson and Peal 2020) found that unsafe excreta returns before containment—that is, excreta that never reaches the pit or tank because of either OD, unsafe child excreta disposal, or unsafe toilets without containment—can be significant: in the five GSF country programs surveyed, between 8% and 24% of excreta did not reach containment. Unsafe child excreta disposal represented between one quarter and one half of these unsafe excreta flows, and it is considered a significant public health hazard because child excreta is often disposed of close to the home and, in some cultures, is not considered to be hazardous. Yet, few rural sanitation programs monitor child excreta disposal and diaper disposal or actively promote safe child excreta disposal practices.

While many rural toilets use unlined pits that are covered and replaced when full, there are some rural and peri-urban contexts and technology types (e.g., pour-flush toilets to small lined pits or small septic

tanks) in which the excreta containment systems require periodic emptying. However, **safe emptying and transport services, and safe treatment and disposal sites, tend to be either rare and/or expensive in rural areas (Robinson and Peal 2020)**. Where emptying is required, fecal sludge is often emptied manually and often disposed of in the open (e.g., fields, ditches, and water bodies) close to the emptying site. There is currently little or no monitoring of fecal sludge emptying, transport, treatment, and disposal services in rural areas, and few incentives or mechanisms to promote or enforce safe practices (Robinson and Peal 2020). One of the challenges is that off-site sanitation services involve both informal and formal service providers, and households are often unaware of what happens to the fecal sludge once it leaves their property. In contexts where off-site services are utilized, household surveys are insufficient to assess the use of SMSS, with additional monitoring instruments (e.g., surveys of service providers and local authorities) required to monitor and regulate these off-site services.

The emerging focus on AWS and the operational frameworks developed by programs provide a response to the points discussed above, noting that AWS is a framework, rather than an approach (as discussed further in Section 3). Current approaches to rural sanitation and hygiene have not been able to reach equity, scale, and sustainability at the level required to ensure achievement of sanitation and hygiene targets. Slippage and other sustainability challenges strongly relate to a lack of systems and resources, such as planning, M&E, and continued follow-up with communities and households that have made sanitation gains. These problems are compounded by the presence of low durability toilets induced by CLTS and the lack of developed sanitation markets that can facilitate wider access to durable toilet product systems. Additionally, CLTS and MBS mostly focus on getting people to access and use toilets but less so on the requirements to ensure SMSS. The continued projectized approach with many partners implementing and funding interventions separately and the lack of available public financing leaves most local governments under-resourced and under-capacitated to ensure strong local government leadership, coordination, and harmonization. Vulnerable populations and those in challenging contexts require more targeted time- and resource-intensive approaches and support to access and use sanitation and hygiene services. The following sections will explore how AWS could respond to these and other challenges.

3.0 DEFINING AREA-WIDE SANITATION

3.1 WHAT IS AREA-WIDE SANITATION?

The review team took as a starting point that **AWS is a framework that aims to ensure sanitation and hygiene for the entire population within a given administrative area.** Specifically, AWS is outcome-oriented and focuses on the entire population meeting sanitation and hygiene coverage targets set for that area. For sanitation, the defined outcomes can span the JMP⁷ service levels, but they generally aim for either basic or safely managed services (or otherwise align to government sanitation targets), provided that the defined outcomes are universally attained within that area.^{8, 9} For hygiene, this also focuses on achieving the practice of key hygienic behaviors, such as handwashing with water and soap at appropriate times (Box 1). Handwashing is specifically referenced in the SDG 6.2 indicators, has its own JMP hand hygiene service levels, and is also included in many ODF protocols. Table 1 shows the JMP’s sanitation and hand hygiene service levels, respectively.

SANITATION SERVICE LEVELS		HAND HYGIENE SERVICE LEVELS	
Safely Managed	Use of improved facilities that are not shared with other households and where excreta are safely disposed of in situ or removed and treated offsite	Basic	Availability of a handwashing facility with soap and water at home
Basic	Use of improved facilities which are not shared with other households	Limited	Availability of a handwashing facility lacking soap and/or water at home
Limited	Use of improved facilities shared between two or more households		
Unimproved	Use of pit latrines without a slab or platform, hanging latrines, or bucket latrines	No Facility	No handwashing facility on premises
Open Defecation	Disposal of human feces in fields, forests, bushes, open bodies of water, beaches, and other open spaces or with solid waste		

Source: UNICEF-WHO JMP 2021.

⁷ The WHO-UNICEF JMP for water supply, sanitation, and hygiene.

⁸ For this desk review, the review team defines sanitation and hygiene outcomes in accordance with the definitions set by the JMP for sanitation and hygiene service levels, as shown in Table 1.

⁹ For this desk review, the team focuses on household access to sanitation and hygiene and the attempt to reach universal, area-wide access for all households. While public and institutional access to sanitation and hygiene are relevant components to AWS, they are not explored in this review.

Box 1. Hygiene and AWS

Rural sanitation programs almost universally include a hygiene promotion element due to the near inseparable nature of sanitation and hygiene in the quest to prevent fecal contamination and fecal-borne diseases. Depending on the context, the focus of this hygiene promotion may differ and include anything from handwashing with water and soap, safe water use and treatment, menstrual hygiene management, bathing, food hygiene, animal husbandry, animal feces management, and others. Previous research has shown that handwashing with water and soap is one of the most effective ways to prevent the spread of fecal-borne diseases including diarrhea (WHO 2017; UNICEF 2018a; USAID 2021a; Wolf et al. 2022). As such, it has been explicitly included in SDG 6.2 and is frequently prioritized within ODF plans and government sanitation policies that incorporate handwashing and hygiene promotion interventions alongside sanitation programming (Robinson and Peal 2020). Handwashing is thus crucial to achieving the health benefits of increased access to and use of sanitation services and remains a central tenet of AWS. However, in the context of this desk review, hygiene promotion or hygienic behaviors are referred to in a broad sense, without necessarily distinguishing between handwashing promotion or broader hygienic behaviors, which are program and context specific.

AWS is aligned to and defined by recent global sanitation and hygiene targets that prioritize universal coverage. In line with the HRTS and the establishment of the SDGs in 2015 (UN 2014; UN n.d.b.), WASH-sector normative guidance and frameworks emphasize the need for universal latrine coverage with the ultimate goal of reaching universal access to at least basic sanitation (WHO 2018; UNICEF-WHO JMP 2019; WaterAid 2019; Gibson, Eales, and Nsubuga-Mugga 2018, SWA 2018). SDG 6.2 targets universal coverage for all, which has subsequently been adopted by a significant share of member states in national sanitation policies. Almost half of the countries included in the 2019 GLAAS status report reported having WASH policies in place that encourage universal sanitation coverage by 2030 (WHO and UN-Water 2019).

AWS is both a response to the focus on universal coverage and a recognition that past interventions and partnerships to improve access to sanitation and hygiene have largely been fragmented and unsuccessful in reaching last-mile populations. Being able to respond to the needs of vulnerable and other last-mile populations is a key step toward universal latrine coverage in a given area (UNICEF-WHO JMP, 2019). At their core, area-wide programs seek to promote equity and inclusivity by requiring that everyone within an area achieve improved sanitation and hygiene outcomes, with particular attention toward marginalized communities unsuccessfully reached by past interventions (Box 2 outlines more details on the gender equality and social inclusion (GESI) dimensions of AWS). This focus on universal coverage contrasts with or goes beyond existing approaches and projectized practices (whether CLTS, sanitation marketing/MBS, or others), which have either been implemented in silos or focused on selected geographies (e.g., MBS programs that avoid challenging contexts requiring expensive product systems or places too far from supply chains to reach profitably, or CLTS programs focusing on numbers of ODF communities without aiming to reach all communities within an administrative area). Under AWS, rather than identifying a single intervention or tool, a variety of interventions, approaches, and stakeholders may be combined, as appropriate in a given context, to support achieving the intended outcomes for the entire population within the respective area. This involves a particular focus on vulnerable and marginalized groups, such as, but not limited to, women/girls, men/boys, persons with disabilities, the elderly, those living in challenging contexts, and other marginalized populations.

Box 2. GESI in an AWS Context

Driven by the goal to reach all populations within a given area, AWS seeks to expand and sustain access for marginalized and disadvantaged populations. To achieve this, AWS adopts a GESI lens to ensure that all programming reaches its intended populations and that all groups within a given area can fulfill their right to sanitation services. The emphasis of GESI in AWS builds off of a large research base in the sector around achieving more equitable and inclusive sanitation outcomes. One example of this is equality and non-discrimination (EQND), a key equity principle widely integrated into CLTS and broader sanitation programming, for example by the GSF, to support equal access (House, Cavill, and Ferron 2017; Water Supply and Sanitation Collaborative Council [WSSCC] 2019a). In addition to EQND, this GESI lens includes several principles, frameworks, and terminologies central to AWS that can help practitioners prioritize marginalized and disadvantaged groups in program design, implementation, and monitoring.

Equality terminology explained

Equity is the principle of fairness and involves recognizing that people are different and need different types of support and resources for their rights to be recognized. In many ways, equity is the process of achieving **equality**, a legal principle that ensures that everyone enjoys the same opportunities and rights.

Treating people equally will not necessarily result in equitable outcomes for them if their starting point was not equal to begin with. It is, therefore, important to aim for **substantive equity**, taking sex, race, age, ethnicity, disability status, and others into account and putting special measures in place, such as allocations or support to specific disadvantaged groups, to ensure **equality of opportunity**.

Linked to equality is the principle of **non-discrimination**: the legal principle that prohibits any distinction, exclusion, or restriction that results in either an individual or group of people not being able to enjoy or realize their human rights on an equal basis with others based on “prohibited grounds.”

For equality to be achieved, it requires **inclusion**—for people to be present and actively engaged in processes that ensure their needs and rights are recognized. This requires understanding **inequality** and barriers faced. A key concept is **vulnerability**: individuals/groups under threat of physical or mental harm, either at times of conflict, abuse, rape, or neglect or because of disadvantaged social or economic status. All individuals may sometimes be vulnerable, requiring support to realize their human rights. If that support is never forthcoming, this can imply **marginalization**: a process that systematically denies people opportunities and resources available to others. The most extreme form of marginalization is **exclusion**. People who are excluded often find themselves without a voice, unheard, unable to influence decision making, or not counted.

Yet, it is essential to emphasize the situation that makes people vulnerable rather than assigning entire groups that status. This is reflected in the terminology of people who are **potentially disadvantaged**, or in other words: “individuals and groups who may be vulnerable, marginalized, excluded or actively discriminated against, or experiencing inequities, inequalities or stigma” (House, Cavill, and Ferron 2017).

This equity terminology is also paired with additional GESI principles, as listed by the WSSCC (2019b), including:

- **Recognize difference:** including the contributions different people can make through their participation
- **Do nothing about us, without us:** Involve people who may be disadvantaged in discussions and decision making, including on respectful terminology, and collaborate with organizations representing people who may be most disadvantaged.
- **Do no harm:** Take every precaution to ensure people will not be harmed through interventions, including inadvertently.
- **Empower:** Promote confidence through encouraging active participation in decision-making.
- **Facilitate support where needed:** Identify and target support to those people who need it most in

a transparent and effective way, starting from support measures at the household and community level, but also including external measures, such as national targeted support mechanisms and social safety nets.

- **Commit to building capacities:** Leaving no one behind (LNOB) requires a mindset shift and a general increase in capacity on how to integrate EQND into policies, programs, and processes.
- **Learn and improve:** Listen to those who may be disadvantaged and benefit from their skills.

The intermediate outcomes that AWS aims to achieve will vary depending on the context and pre-existing level of sanitation access and service delivery, but **the end goal of AWS is to achieve universal and sustained use of SMSS and basic hygiene**. To achieve this goal, everyone within an area must achieve a set of disaggregated outcomes, including:

- Universal use of a durable toilet with safe containment,
- Universal practice of hand hygiene at critical times,
- Basic sanitation and hygiene services¹⁰ in institutions and public spaces,
- Universal safe treatment or disposal of human waste, including emptying and transport, FSM, or in-situ treatment, and
- Universal safe management and disposal of IYC feces.

These outcomes broadly correspond with the key indicators used by the JMP and advocated by the WHO Guidelines on Sanitation and Health (UNICEF-WHO JMP 2021; WHO 2018).

By focusing on SMSS as the final outcome, governments are encouraged to start planning for SMSS and building the service delivery chain from the beginning of sanitation programming. This allows governments to preemptively establish structures and systems to plan for continued use of high-quality, durable toilets, preemptively ensure the sustainability of sanitation services and hygienic practices by engaging in post-ODF planning, and connect interventions that support those outcomes toward the highest goal of reaching SMSS in accordance with national and global sanitation targets.

The overarching push toward SMSS increased attention to full pits and the safe containment, emptying, and disposal of excreta in rural sanitation facilities. In rural areas of most low-income countries, most of the population uses on-site sanitation. It has been frequently assumed in sanitation programs that improved sanitation facilities that store waste in latrine pits and septic tanks were likely to safely contain excreta. Thus, many monitoring frameworks for rural sanitation examined the presence of functioning toilets that met improved criteria and reported on the use of toilets by households, with little attention given to either the safe containment of excreta during the life of the facility, or to what happened to the fecal sludge in these pits and tanks when they filled up (Robinson and Peal 2020). To combat this, JMP revised and upgraded the sanitation monitoring definitions in 2018 (UNICEF-WHO JMP 2018) in line with the 2018 WHO Sanitation and Health Guidelines (WHO 2018). In addition, the JMP's core questions for household surveys now include questions on emptying of on-site sanitation facilities, disposal of excreta from on-site sanitation facilities, disposal of child stools (expanded question), containment of wastes (expanded question), and discharge

¹⁰ We refer to basic services for institutions, in line with the JMP which stipulates basic service levels for schools and healthcare facilities as the highest service level with clear minimum definitions, recognizing that advanced service levels would need to be defined at national level.

of wastes from septic tanks. Under an area-wide framework, capturing practices around safe containment and management are essential to achieving and sustaining SMSS.

AWS assumes a flexibility that allows program implementers to disperse resources and target interventions to the individuals or groups that need them the most. This tailoring of interventions enables households and individuals to advance from their respective sanitation service level toward SMSS in the most efficient, expedient, and sustainable manner. Under AWS, interventions are tailored to account for broader context and context-specific needs and address the barriers that vulnerable and disadvantaged populations face in accessing sanitation services. Studies define these barriers in several ways, such as environmental, institutional, and attitudinal (WaterAid 2018; Amokwandoh, Kunyegbe, and Ayi-Bonte 2020), or physical, institutional, and social (White et al. 2016). This tailoring of interventions within an area-wide framework implies that different groups within a given area may receive different sanitation interventions depending on their pre-existing levels of sanitation access (Table 1) and their different contexts and circumstances (Box 2), but also that those efforts are intentionally planned, coordinated, and, as need be, prioritized over an administrative area to collectively progress toward SMSS.

In theory, the objective of AWS is to move households toward SMSS as quickly as possible (which may not require or assume linear progress). Within a given district, households at different levels of sanitation services and with unique barriers to access (e.g., marginalized, vulnerable groups) will require different interventions to meet their needs. AWS planning and implementation intends to find and deploy a range of approaches to achieve the desired sanitation objective across these different sub-populations (whether to aim toward or remain at SMSS once they have reached it). In reality, population-level progress toward universal access occurs gradually. Considering, for example, existing capacity and resource constraints, many given areas may not consider obtaining universal SMSS realistic at this time. A key sector position, therefore, declares that “targeting the unserved, progressively eliminating inequalities and maintaining existing services should take precedence over improving services for the already served” (SWA 2018). While a rights-based perspective strongly informs this position, health sector normative guidance suggests that “a locally-specific risk assessment and management approach can identify [...] incremental improvements at each step of the sanitation service chain to allow progressive implementation towards sanitation targets and allows investment to be prioritized according to the highest health risk and thereby maximize gains” (WHO 2018, 15). The “how” of either of these starting points—e.g., whether interventions should be implemented in a phased or parallel approach, how to ensure sustained service provision, and how to build system and implementers’ capacity at the local level—is a key outstanding question in operationalizing AWS, where more evidence is needed. The following sections will discuss these points further.

The aim of working across entire administrative areas to provide coverage to all those within includes several hypothesized benefits, including the following:

- **Health Benefits:** Current sector guidance recommends that “access and use of safe toilets by the entire community are needed to achieve health gains from sanitation” (WHO 2018, 12). Recent research supports this claim and suggests that higher thresholds of latrine coverage and usage in an area can potentially lead to greater health benefits for all those within that area (Carter 2017; Viswanathan 2017). Thus, working area-wide with the aim of universal coverage may provide greater herd protection over these administrative areas compared to a less comprehensive approach (USAID 2020).
- **Reduced Inequality:** This includes deliberately targeting and engaging women, girls, vulnerable and marginalized populations to address persistent inequalities in sanitation programming and improve their well-being.

- **Strategy Alignment:** Expanding coverage to entire administrative units allows for stronger alignment in developing a common strategy, policies, and budgets among different stakeholders for implementation, including across the different rural to (peri)urban geographies. This also supports the localization of SDG 6.2 and other sector mandates that aim for universal and area-wide coverage, and may promote economies of scale (e.g., for FSM, MBS, or financial support services).
- **System Strengthening:** Working area-wide can strengthen planning, coordination, M&E systems, and capacity required to plan and track progress for all households and communities within an administrative area, rather than project-specific planning and monitoring of piecemeal interventions or target-specific monitoring of only select individuals or communities.
- **Political Capital:** Interventions (successfully) implemented area-wide produce more visible impact compared to more targeted approaches, potentially leading to increased political capital for elected officials in program areas.
- **Political Harmony:** Working area-wide relieves possible political challenges that can be associated with prioritizing or selecting individual communities for interventions. It also allows for a more judicious and equitable distribution of sanitation programs and their benefits.
- **Models for Success:** Improvements that occur due to area-wide programming can provide a model for success that influences national sanitation policies, strategies, and plans toward more equitable sanitation outcomes (WaterAid 2019).

3.2 EARLY MODELS OF AWS

While AWS as a term and operational framework lacks establishment in literature, the characteristics of AWS are not new. Many components of AWS already exist in past and current sanitation programs and policies, or are built into national ODF and post-ODF strategies of several country governments that aim to achieve universal elimination of OD (and higher sanitation service levels for those adopting post-ODF plans). In urban areas, CWIS is one model that receives attention for its systems-thinking framework that works area-wide to secure access for all within its urban boundaries. These models and strategies exemplify several aspects of AWS by addressing access for vulnerable and last-mile populations with the aim of the entire population achieving the intended outcome within a given area (e.g., ODF status in the case of national ODF plans).

3.2.1 ODF PLANNING

ODF planning above the community level (i.e., district or national ODF plans and policies) can be considered an early paradigm of area-wide programming since entire administrative areas target the specific outcome of ending OD. These plans, when crafted well, utilize a mix of interventions, strategies, and stakeholders to achieve, monitor, and sustain that outcome. While the interventions that may be used to reach ODF are not inherently area-wide—interventions such as CLTS and behavior change communication (BCC) can be implemented at the community level in a scattered approach—planning for ODF at a (sub) district, regional, or national level with the aim of achieving that ODF target for all residents and utilizing a mix of interventions can be considered AWS (UNICEF 2018b).

However, there currently exists no universally accepted definition of ODF in ODF plans (USAID 2018a). In the Handbook on Community-Led Total Sanitation, Kar and Chambers (2008) define OD as “defecating in the open and leaving the stuff exposed” and ODF as “no feces are openly exposed to the air” through a pit latrine with a fly-proof lid. At the country level, however, definitions for and protocols to achieve ODF can vary widely. This has led to a variety of approaches used to

progress toward ODF status (USAID 2018a). Besides measuring the cessation of OD, a review of 13 national ODF policies by GSF found that different ODF plans defining “ODF status” used at least 11 other criteria (WSSCC 2016a). One example of these criteria concerns the role of shared latrines in ODF planning; in some national ODF plans, such as in Ghana, access to shared or communal latrines can still count toward ODF status while others, such as in Indonesia, require that households have at least one private latrine (USAID 2018a; Government of Ghana 2010a; Republic of Indonesia 2013). Additional criteria include the presence of physical latrine qualities (e.g., fly-proof lids), evidence of consistent latrine use, and availability of related hardware, including handwashing stations (WSSCC 2016a; WSSCC 2016b). Most ODF policies contain at least one criterion around hand hygiene (e.g., handwashing with soap and water) and often also one around institutional hygiene (e.g., schools, health clinics, public buildings).

Additionally, not all cases of ODF planning have been implemented on an area-wide level.

While aiming for ODF achievement over a broad area sets an outcome target over a geographic area, it does not ensure that the programmatic approaches will aim for universal coverage at scale. This discrepancy can be partly attributed to the fact that many early ODF plans were established before the creation of recent sectoral guidelines and the SDG targets of universal coverage that lay the groundwork for AWS (Federal Democratic Republic of Ethiopia 2006; Federal Democratic Republic of Ethiopia 2012; Government of Ghana 2010a; Government of Sierra Leone 2012). In a recent review of 14 national sanitation and ODF policies, eight of the 14 plans reviewed were developed before the establishment of the SDGs in 2015 (Robinson 2021). For older ODF planning, while the objectives may consist of national ODF achievement, the interventions, verification protocols, and subsequent monitoring and follow-ups often focus on community-level outcomes without explicitly considering the broader district, provincial, or state context (Robinson 2021). Concretely, while these plans may have outlined a strategy to work and verify village by village—and covering all villages remains a necessary prerequisite of reaching area-wide ODF—they did not necessarily stipulate targets, strategies, and protocols for ODF certification and follow-up support across entire geographies.

Many countries experienced challenges with successfully implementing and operationalizing their ODF plans, with few reaching their ODF targets.

In Kenya’s “ODF Rural Kenya” campaign, a two-year program established in 2011 with the aim of achieving ODF status in 269 rural districts by the end of 2013 (Republic of Kenya 2014), only one district and 2% of villages achieved certification as ODF by the end of the program (Musyoki 2016; Adhikari et al. 2021). Indonesia experienced a similar outcome, where the goal of achieving national ODF status fell short on two occasions at the end of two five-year ODF plans (one from 2005–2009 and another from 2010–2015) (Robinson 2022). As of 2020, 11 years after the original target date for nationwide ODF status, Indonesia’s OD rate remains at 6% or nearly 16 million people (although substantial progress has been achieved, with OD rates falling from 25% in 2005 to 6% in 2020) (World Bank 2022; UNICEF-WHO - JMP 2021). In both cases, national ODF plans lacked the adequate funding, capacity, or political support needed to effectively achieve their respective targets.¹¹ Additionally, prioritizing ODF achievement as the end policy goal often fails to account for the need to push households toward higher levels of sanitation access (toward SMSS) and ensure that those outcomes remain sustainable over time. These cases showed that planning for area-wide implementation (in this case of an ODF plan) can provide a more strategic framework for universal coverage and prioritizing vulnerable and marginalized communities, but ensuring that AWS outcomes are achieved and sustained also requires financing, other systemic and institutional support mechanisms, and a broader focus on sanitation and hygiene service delivery.

¹¹ Andy Robinson, personal communication, 2022.

3.2.2 PLANNING BEYOND ODF

The adoption of the SDGs shifted the sector to strategies that aim for higher order sanitation outcomes (often in addition to ending OD), including access to basic sanitation and SMSS (as highlighted in the SDGs and prominent sector guidelines). For countries that adopted an ODF strategy or road map, this involves a growing focus on post-ODF strategies (specifically those that promote a phased approach for areas to achieve gradually higher sanitation outcomes). Such post-ODF strategies are designed to encourage sustainability of ODF status and plan for forward progression or sustain sanitation gains made through a focus on safe in situ treatment or emptying, treatment and disposal of waste, depending on context. Among others, post-ODF plans are meant to ensure that vulnerable and disadvantaged populations most at risk of experiencing slippage post-implementation have support systems in place to continue using basic or safely managed sanitation services.¹² In all cases, and particularly under an AWS framework, planning beyond ODF involves moving the goal post from eliminating OD to the progressive advancement toward SMSS. However, these higher sanitation goals also require longer-term interventions, additional financing, sustained monitoring, and more frequent outcomes assessments over time.¹³

Post-ODF planning further builds on ODF plans by establishing guidance by or to (local) governments for continued advancement toward SMSS—reflecting the aims of AWS. Post-ODF strategies have been developed (with more under development) and implemented on an area-wide scale (e.g., district, municipality) and built into several countries' ODF plans or national sanitation frameworks, including Nepal, the Philippines, and Zambia:

- **Nepal:** The 2017 national Total Sanitation Guidelines feature an array of activities and interventions including forming local WASH committees, capacity building trainings, and sanitation knowledge campaigns that are implemented at an area-wide level (municipality, district, and province) toward the goal of reaching total sanitation by 2030. The guidelines call for context-specific approaches based on local needs, mandating that areas reach ODF status before moving on to total sanitation¹⁴ (Government of Nepal 2017).
- **Philippines:** A 2019 Department of Health order unveiled the Philippines Approach to Sustainable Sanitation (PHATSS), a phased approach to guide local government units (LGUs) in achieving higher levels of sanitation access across areas (in this case LGU). This is done through the creation of local coordination bodies and policies alongside demand-side stimulation with interventions, including CLTS and BCC (Republic of the Philippines 2019).
- **Zambia:** The Open Defecation Free Zambia Strategy 2018-2030 similarly includes a phased approach that lays a path forward for districts to reach SMSS after achieving ODF status through a combination of demand creation, systems strengthening, and FSM interventions (Government of the Republic of Zambia 2018).

These three post-ODF strategies (Nepal, Philippines, and Zambia) are examples of strategies that aim toward higher levels of sanitation access (although not always specifically defined as “SMSS”) and that prioritize working area wide. However, as ODF plans can vary substantially by country, so, too, can the focus of post-ODF strategies and approaches in terms

¹² In some rural contexts, proper in situ treatment (e.g., safe abandonment) of filled pits considered a basic sanitation service, may be considered to meet SMSS standards.

¹³ Andy Robinson, personal communication, 2022.

¹⁴ The Master Plan defines total sanitation as “a range of facilities and hygiene behaviors that lead to achieve sanitized condition of the designated areas,” which includes municipalities, villages, and institutional settings (e.g., schools) (Government of Nepal 2011).

of the interventions they deploy, stakeholders and coordination mechanisms involved, resources allocated, and benchmark outcome targets to achieve over time. While these components will all be required to achieve the goals set out under AWS, understanding exactly how they support achieving AWS goals is too soon to tell, but is nevertheless an important question for the sector. In addition, the review team acknowledges that many countries and administrative areas will experience a situation where there will be a mix of communities in pre- and post-ODF stages, possibly requiring different programmatic approaches and skill sets to manage their progression.

Given the varying definitions for ODF and post-ODF used across countries, these definitions and metrics will not always maintain comparability across contexts, nor will they necessarily align to direct progression of sanitation service levels (Table 1). As countries begin planning for universal achievement of SMSS from the beginning of sanitation programming, this approach means that governments and implementers will increasingly aim to work with communities and households to move directly from lower or no levels of sanitation access to basic or safely managed levels of service. This coincides with an ongoing discussion in the sector on how planning for safe containment and management of waste, and full progression toward SMSS, can happen at the earliest stages of sanitation programming. Yet, it needs to be acknowledged that a more phased approach toward reaching higher service levels, where households move toward use of unimproved or very basic, non-durable latrines first, is generally linked to the rural reality of low levels of finance, capacity, resources, experience, community knowledge, conducive social norms, and market access. While better planning for SMSS from the start is projected to support a faster progression to higher levels of sanitation services, how exactly this can be achieved across contexts requires more research.

3.2.3 CITY-WIDE INCLUSIVE SANITATION

In urban areas, one prominent example of an AWS framework in practice is CWIS. First conceptualized in 2016, CWIS is defined as an equity-driven framework to provide universal and sustainable access to SMSS in a given urban area (ADB 2021, Schrecongost et al. 2020). CWIS calls for a shift in focus from infrastructure-driven solutions, specifically centralized wastewater treatment and sewerage, toward a broader set of approaches that work along the sanitation service chain from waste containment to reuse or disposal in accordance with the SDG 6 targets of achieving universal access to SMSS (Gambrill, Gilsdorf, and Kotwal 2020). In addition, it calls for coordination with related sectors including water supply, solid waste, and housing, thus recognizing that sanitation planning, and consequently service delivery, should be integrated within an urban service delivery framework (Schrecongost et al. 2020).

The development of CWIS arose from many of the same systemic gaps that affected past approaches to rural sanitation, including lack of equity in sanitation access for poor and marginalized groups, poor coordination across sectors and stakeholders, and fragmented interventions that were unsuccessful in progressing universal access and sustainability (ADB 2021; Schrecongost et al. 2020; Gambrill, Gilsdorf, and Kotwal 2020). While CWIS focuses squarely on urban and peri-urban areas, its core principles (Table 2) have high relevance and applicability to rural AWS. City/municipal governments and rural municipalities or districts are often different governing entities with separate resource allocations and different jurisdictions and levels of regulation. However, in many countries, predominantly rural districts face increasing growth of small towns and higher density/peri-urban areas within their borders, and there are multiple examples of urban service providers becoming increasingly mandated (or private providers expanding their business models) to service the outlying, rural-mixed areas around the city borders (e.g., Gounden and Alcock 2017; Dhenkanal District Administration 2020). In this respect, CWIS experiences and approaches may inform AWS, and there may exist opportunities to explore potential alignment or a combination of CWIS and AWS along the urban-rural continuum in future research.

TABLE 2: PRINCIPLES FOR CITY-WIDE INCLUSIVE SANITATION					
PRINCIPLES FOR CWIS		THEMATIC FOCUS			APPLICABILITY TO RURAL SANITATION?
		UNIVERSAL COVERAGE	EQUITY	GOV.-LED	
1	Everyone in an urban area, including the urban poor, benefits from equitable safe sanitation services	✓	✓		Yes
2	Gender and social equity are designed into planning, management, and monitoring		✓	✓	Yes
3	Human waste is safely managed along sanitation service chain, starting with containment	✓		✓	Yes
4	Authorities operate with a clear, inclusive mandate, performance targets, resources, and accountability		✓	✓	Yes
5	Authorities deploy a range of funding, business, and hardware approaches—sewered/non-sewered—to meet goals		✓	✓	Yes ¹⁵
6	Comprehensive long-term planning fosters demand for innovation and is informed by analysis of needs/resources	✓		✓	Yes
7	Political will and accountability systems incentivize service improvements in planning, capacity, and leadership			✓	Yes

Source: Schrecongost et al. 2020.

These early examples of AWS inform the construction and components of AWS, which are explored in the following sections. Lessons from ODF implementation show that proper financing and institutional support mechanisms need to support programming for eliminating OD to achieve outcomes at scale. Planning beyond ODF requires a shift in focus that aims for higher levels of sanitation services (that can be sustained over time) and an advance toward SMSS to the greatest extent possible. Though a useful systems-based model at scale for urban areas, CWIS may not bear full relevance to rural areas where OD is still practiced and/or where coverage of SMSS remains disproportionately lower, but can nonetheless inform broader aspects of AWS. The next section turns to existing area-wide frameworks to begin to identify the key principles behind AWS.

In summary, AWS can have multiple disaggregated and intermediate sanitation and hygiene outcomes; requires contextualization and careful yet flexible planning to address multiple and complex vulnerabilities and barriers to inclusion; and involves a mix of system strengthening and sanitation and hygiene interventions and approaches to achieve universal outcomes. For this reason, like CWIS, the review team considers AWS a framework rather than an approach and defines AWS as **a systems-based, outcome-driven framework to achieve equitable, universal access and use of safely managed sanitation and hygiene in a given administrative area.**

¹⁵ With the likely exception of sewerage sanitation.

4.0 A REVIEW OF AWS FRAMEWORKS

AWS has been implemented under a diverse array of frameworks and approaches. Few AWS frameworks exist, and those that do vary across organizations and implementing partners, each suited to a different construction of what factors are deemed necessary to achieve universal access to sanitation. This desk review identified five frameworks for AWS developed by global WASH organizations. These frameworks specifically use the term “area-wide sanitation,” “area-wide programming,” or satisfy the AWS definition by conducting programming over an entire administrative area with the aim of reaching everyone within that domain. Most of these frameworks were developed through decades of experience in rural sanitation alongside practical experiences of working with local-level governments and implementing organizations to improve coverage and equity of access to sanitation products and services. Table 2 lists the AWS frameworks and their core components in implementation.

There are commonalities across the five sources that define AWS along four key principles: (1) working at scale, (2) aiming for universal, inclusive coverage, (3) governments are in the lead, and (4) prioritizing sustainability (Tillett and Smits 2017; WaterAid 2019; USAID 2020; World Bank 2019). These key principles align with broader sector guidance, including the newly released UNICEF Game Plan to Reach Safely Managed Sanitation 2022-2030, as well as the WHO guidelines on sanitation and health that include universal coverage, access to quality sanitation hardware and services, and sustainability as its key objectives (UNICEF 2022; WHO 2018). Regional guidance including the African Sanitation Policy Guidelines and eThekweni and Ngor declarations also highlight the need for African countries to prioritize universal coverage within national sanitation policies (African Ministers’ Council on Water [AMCOW] 2015; AMCOW 2021; Water and Sanitation Program [WSP] 2008).

In operating **at scale**, WaterAid, UNICEF, Plan International, USAID, SNV, and Agenda for Change all state that **working at an area-wide level suggests that sanitation service provision is coordinated and implemented at an administrative level with the aim to expand access to the entire population** (WaterAid 2019; USAID 2020; Tillett and Smits 2017; SNV 2019a). “Area” in this sense refers to varying local political and administrative boundaries, ranging from commune, district, municipality, county, provincial level, and even up to the national level, while retaining a consistent focus on scale for sanitation service delivery (Tillett and Smits 2017; WaterAid 2019; USAID 2020; World Bank 2019; SNV 2019a).

To achieve universal, inclusive, and equitable coverage, AWS must strategically and intentionally identify marginalized or at-risk populations and adjust interventions to the needs of the most vulnerable. In their 2019 Call to Action, WaterAid and a consortium of global partners including the World Bank, Plan International, UNICEF, SNV, and the WSSCC identify that achieving “inclusive solutions” will require tailored approaches and a combination of sanitation interventions that can effectively address multi-dimensional deprivations (World Bank 2019). This may involve a need to partner with non-WASH actors, such as rights-based organizations or those representing particularly vulnerable or marginalized populations, to inform the most appropriate and effective ways to engage these populations. This emphasis on inclusivity and tailored approaches also implies that individual interventions must fit a specific context and thus may differ per intended population (WaterAid 2019). One method of doing so includes collecting and disaggregating data to accurately measure sanitation access for marginalized populations to ensure that interventions can be tailored to their needs (SNV 2019b). By incorporating principles of inclusion in the design and planning stage, AWS programming prioritizes last-mile populations, including female- or child-headed households, widows, the ultra-poor, the elderly, and persons with disabilities, who are often the last recipients of targeted interventions and can face some of the largest difficulties with sustaining gains in access (World Bank 2019; WaterAid 2019).

TABLE 3: FRAMEWORKS OF AREA-WIDE SANITATION

ORGANIZATION	DEFINITION	CORE COMPONENTS
<p>USAID (USAID 2020)</p>	<p>AWS/coverage: moving beyond household- and community-level targeting to district or county levels that align private and public sector stakeholders, invest in market systems-level approaches, and focus on impact and sustainability at scale</p>	<ol style="list-style-type: none"> 1. Governance: Includes sector policies and coordination mechanisms; offers local level capacity to design, implement, monitor, and evaluate; provides oversight and support to sanitation market development. 2. Financing: Devoted public funding helps implement programs and target universal coverage; incentivizes household investment in sanitation; provides capital and financial support to sanitation enterprises. 3. Markets: Supporting markets facilitates products and services availability for end users; strengthens regulatory and enabling environment for sanitation enterprises. 4. Behaviors: Aligns to individual and community motivations for sanitation; identifies and addresses societal and institutional norms and behaviors; supports demand triggering with complementary and area-wide interventions.
<p>UNICEF/ WaterAid/Plan International (WaterAid 2019)</p>	<p>Area-wide programming: programming taking place within an administration unit (e.g., district/municipality-wide) that ensures universal sanitation access within the area through inclusive programming, local government leadership, and local systems strengthening</p>	<p><i>Core Components</i></p> <ol style="list-style-type: none"> 1. Monitoring, evaluation, and learning (MEL): Observes and checks the progress, quality, sustainability, and equity of implementation, outcomes, and impacts. 2. Enabling environment strengthening: Identifies and assesses bottlenecks and barriers, using a system-wide approach that tackles a number of areas simultaneously, including policy, financing, institutions, and monitoring. 3. Cost assessment: A rough estimate of the overall program budget based on the estimated costs of achieving the proposed program objectives. 4. Program management and capacity development: Management capacity, including the related systems for the strengthening, advocacy, planning, budgeting, HR, partnerships, and coordination functions. <p><i>Implementation Strategies:</i> Identifies a mix of interventions that are tailored for four different geographical contexts and areas, including (1) rural remote, (2) rural on-road, (3) rural mixed, and (4) difficult contexts (groups to reach).</p> <p><i>Core Themes and Principles</i></p> <ol style="list-style-type: none"> 1. Equity and non-discrimination: Active strategies and interventions to identify and support hard-to-reach, poor groups and those currently without adequate sanitation and hygiene. 2. Gender equality: Promotes gender sensitive, transformative WASH in which steps are taken to actively identify and address the needs of women and girls, as well as negative WASH-related gender norms and stereotypes. 3. Sustainability support: Five factors of sustainability, including institutional sustainability, financial sustainability, functional sustainability, equity sustainability, and environmental sustainability. <p><i>Core Approaches and Intervention Themes:</i></p> <ol style="list-style-type: none"> 1. Hygiene BCC: Handwashing, hygiene, personal, food, menstrual, and safe water management. 2. Environmental sanitation: Animal excreta, solid and liquid wastes, water safety, fecal sludge, and vector control.

TABLE 3: FRAMEWORKS OF AREA-WIDE SANITATION

ORGANIZATION	DEFINITION	CORE COMPONENTS
		<p>3. Nutrition-sensitive WASH: Baby WASH: safe births, child feces management, child hygiene, and clean play spaces.</p>
<p>Call to Action for Rural Sanitation (World Bank 2019)</p>	<p>Area-wide programming: programming for all within an administrative area aimed at leveraging existing government systems and institutions, national-level partnerships with local level capacity building, delivery beyond the household to public spaces, and aligning funding and roles and responsibilities for sustainability</p>	<ol style="list-style-type: none"> 1. Government leadership: Programming is national and with support and systems-strengthening efforts prioritized for local governments to implement and deliver. 2. Stakeholder alignment: Stakeholders are aligned on sector strategies and targets and cross-sectoral partnerships are developed for learning and synergy. 3. Inclusive solutions: Identifying and intentionally targeting traditionally hard-to-reach populations in any given program area and acting accordingly to prioritize access and inclusion. 4. Evidence-based and adaptive implementation: Program design is suited for the specific context of the implementation area and includes a combination of different approaches with feedback loops for learning and improvement.
<p>Agenda for Change (Tillett and Smits 2017)</p>	<p>District-level road map: an inclusive program approach that ensures universal access to sanitation services throughout an entire program area (e.g., district), including provisions for partnerships and collaboration with other stakeholders, sustainable financing methods, and accountability and ownership mechanisms</p>	<ol style="list-style-type: none"> 1. District-wide approach: Local systems strengthening and an alignment of stakeholders toward a shared goal of universal sustainable sanitation access. 2. Capacity: Assess capacity of local government institutions and engage in capacity-building programming. 3. Baseline WASH assessment: Understand the baseline status of WASH access and service provision within the program area and identify areas for improvement or existing limitations. 4. Program design: WASH plan and financing strategy should be based on evidence and data from baseline assessment with the ultimate goals of universal sanitation access throughout the entire program area. 5. Program implementation: Implementation should be collaborative and coordinated with government leaders, NGOs, and other private sector WASH purveyors.
<p>SNV (SNV 2019a; SNV 2019b)</p>	<p>AWS under SSH4A: Working directly with government partners within local jurisdictions (e.g., district, sub-county, county) to improve access for all</p>	<ol style="list-style-type: none"> 1. Sanitation demand creation: Local organizations are capable of implementing and steering sanitation demand creation at scale, with quality. 2. Sanitation supply chains and finance: Appropriate market-based solutions for a variety of sanitation consumer needs are implemented at scale. 3. Hygiene BCC: Progress in the commitment and capacity of local organizations to implement BCC, with quality. 4. WASH governance: Improvements in local WASH governance in terms of alignment of stakeholders, sector planning and monitoring, transparency, and social inclusion.

To be government-led, AWS highlights the need for local governments to actively direct, oversee, and resource sanitation programming. With recent trends in decentralization among LMICs (and even in more centralized forms of government where local governments are the de-facto implementers of national policies and programs), responsibilities for sanitation programming have often fallen to the local levels of government (Cobos Muñoz et al. 2017). In more decentralized systems, this devolution of authority places local governments at the forefront of strategy, planning, coordination, program implementation, and monitoring and evaluating progress at the area (i.e., administrative) level. This positions governments as the “duty-bearers”—as described by the human rights handbook to water and sanitation—of ensuring that all populations receive access to sanitation services (de Albuquerque 2014). Recognizing the centrality of local governments, WaterAid, UNICEF, Plan International, and Agenda for Change emphasize the need for systems strengthening at the local level and greater capacity building to ensure that local governments are equipped to handle their sanitation mandates (Tillett and Smits 2017; WaterAid 2019). The Call to Action emphasizes soft skills such as leadership and political will that allow local leaders to manage sanitation programming more effectively, in addition to national-level support in areas such as financing and technical capacity (World Bank 2019). USAID views governance as the ability of local governments to oversee all aspects of sanitation programming and service provision, including coordination of stakeholders, the technical design and implementation of interventions, and strengthening M&E systems (USAID 2020). This sentiment is also reflected in SNV’s SSH4A program, which featured capacity building interventions as a part of their approach to ensure that local governments possessed the ability to provide area-wide service delivery (SNV 2019a). Under all definitions reviewed, government leadership and capacity are seen as key drivers for a progressive expansion of access for those without and retaining those outcomes over time.

To prioritize sustainability, AWS incorporates a long-term and systems-thinking perspective that builds toward and sustains progressively higher levels of sanitation services. All five sources are grounded in the SDG targets of achieving at least universal access to basic sanitation (the prescribed goal in sector normative guidance) and laying the groundwork for reaching universal access to SMSS. This focus on sustainability ensures that sanitation outcomes endure (and progress) over time—whether ODF, basic sanitation, or SMSS—and that the infrastructure developed, behaviors encouraged, and services established remain long-lasting and prevent slippage at each level as much as possible (WaterAid 2019; USAID 2020; World Bank 2019; SNV 2019a). To do so, the Call to Action emphasizes the need to ensure that the systems and institutions being strengthened can provide long-term support in the provision of sanitation services (World Bank 2019). USAID also acknowledges that in addition to providing long-term access to at least basic sanitation services, the aim is to progressively provide higher levels of sanitation services as respective areas move toward SMSS (USAID 2020). To achieve this, a strong emphasis on MEL is also highlighted to incorporate feedback loops, allow for course corrections, and ensure that the data and collected insights are used to support future service delivery decisions and build a foundation of best practices (WaterAid 2019; USAID 2020; SNV 2019a). Sustainability also applies to sanitation across challenging contexts, including humanitarian settings and in the context of climate change. These settings generally put added pressure on governments and implementing partners who will need to iteratively adapt to ensure and maintain coverage for vulnerable and marginalized populations.

It is important to acknowledge that the five sources that informed the above principles are interrelated. The stakeholders involved in these frameworks overlap across sources, and even when not directly involved, their individual works are frequently cited across framework definitions. For example, WaterAid, Plan International, and UNICEF contributed to both the Call to Action and the Guidance on Programming for Rural Sanitation. WaterAid is also cited in the development of the Agenda for Change road map, as is SNV in the Call to Action.

Yet, these key principles of scale, universal coverage, government leadership, and sustainability lay the groundwork for the core programmatic components that make up AWS. To identify those core components, the review team first reviewed instances of area-wide programming in practice by DPs and governments. The next section lays out past approaches to area-wide implementation, centered around the key principles described above.

5.0 IMPLEMENTATION OF AREA-WIDE PROGRAMMING

Identifying case studies of programs and interventions implementing AWS remains difficult because few (if any) sanitation interventions imbue the four principles of AWS: scale, universal and inclusive coverage, government leadership, and sustainability. A given sanitation intervention may aim to achieve area-wide scale but may not fully align with all AWS principles or components highlighted above. Although individual interventions will likely not meet the full criteria for AWS, there are examples of programs that incorporate some of the AWS components. This section looks at experiences from implementing organizations and governments that previously implemented sanitation programs that are emblematic of the key principles of AWS. By doing so, this section attempts to extract lessons from past programming efforts that can inform what AWS looks like in practice, as well what the core components are.

5.1 AREA-WIDE APPROACHES APPLIED BY DEVELOPMENT PARTNERS

The review team first reviewed area-wide interventions developed and implemented under DP-driven/supported programs. Sector experts identified these programs through consultations, but due to the lack of documentation around area-wide programming, only three cases were selected for inclusion – noting that the Indonesia program was a government-driven program but benefiting from active World Bank support, engagement and documentation, which is why it was included in this section. Although not all of the key principles of AWS are present in each case, these programs were selected because they have been implemented at scale, incorporate integrated or tailored approaches/interventions, and focus on at least one other key principle of AWS (universal and inclusive coverage, government leadership, and/or sustainability). These programs were also implemented in multiple countries throughout Asia and sub-Saharan Africa at various times over the last two decades. The team reviewed these programs against the following: (1) scale of implementation, (2) role of local government, (3) equity and inclusion considerations and working toward universal coverage, and (4) factors that contribute to sustainability of outcomes. The programs the team assessed are as follows (with additional details provided in Annex A):

- Sustainable Sanitation and Hygiene for All (SSH4A: 2008-2018): **SNV-supported multi-country program in 18 countries**
- Total Sanitation and Sanitation Marketing (TSSM: 2007-2011): **World Bank Water and Sanitation Program-supported program in three countries**
- National Program for Community Water Supply and Sanitation Services (NPCWSSS: 2005-2012): **World Bank-supported program in Indonesia**

Area-wide implementation carried out under these programs deployed a combination of interventions to achieve sanitation outcomes at scale. A notable example of this is SNV, one of the largest DPs to have explicitly used an area-wide framework, through the SSH4A initiative (SNV 2019a). Implemented in 18 countries and 160 districts throughout Asia and sub-Saharan Africa, the SSH4A initiative utilized a four-pillar area-wide framework with the explicit focus on partnering with local and national governments to enhance sanitation service delivery within program areas (Apanga et al. 2021; SNV 2019b; SNV 2019c). The four pillars are demand creation, sanitation supply chain strengthening, hygiene behavioral change communication, and governance (SNV 2019a). These pillars are supported by a strong emphasis on M&E systems built to track the progress of SSH4A programs routinely and accurately and create opportunities for learning and reflection with local government stakeholders (SNV 2019b). The World Bank's TSSM program implemented in India, Indonesia, and Tanzania was also one of the first large-scale programs to implement interventions using a combination of approaches with the guiding principle that "local governments can provide the vehicle to scale up

rural sanitation” (Rosensweig and Kopitopoulos 2010, iii). TSSM utilized CLTS, sanitation marketing, and capacity development interventions to improve sanitation conditions, working area-wide at the district level (Rosensweig and Kopitopoulos 2010).

Implementers of area-wide programming also attempted to integrate equity concerns into their respective approaches (but sometimes falling short of aiming for universal coverage). SNV’s SSH4A mainstreamed gender and other equity considerations into its interventions and programs for both rural and urban areas, while also designing and implementing targeted interventions that expand access to marginalized populations (SNV 2020). One method of integrating equity considerations was through SNV’s monitoring framework for SSH4A, which collected and analyzed disaggregated data for different groups across various metrics, including income, gender, disability, and more, to inform interventions (SNV 2019b). TSSM adapted CLTS programming in Himachal Pradesh (India) and incorporated context-specific information, education, and communication (IEC) approaches such as culturally specific street theater and dance (Robinson 2012). By doing so, TSSM tailored its approach to best fit the needs and beliefs of the community (Robinson 2012). Additionally, in its first implementation phase, NPCWSSS in Indonesia approached equity by working with local governments and communities to build the capacity needed to implement tailored interventions appropriate for local contexts and needs (World Bank 2015). In the second phase, NPCWSSS II scaled its approach by shifting from a community- to a district-wide approach and introducing financial incentives, with the goal of expanding ODF status to everyone within that district (World Bank 2013a).

Strengthening capacity for local governments to lead sanitation programming and create a supportive enabling environment for sanitation is also a prominent theme, one that is key for sustainability. The NPCWSSS in Indonesia helped to build capacity for community decision-making bodies responsible for water, sanitation, and hygiene management (World Bank 2015). This was done through capacity-building interventions for local government officials at the village and community level to increase ownership of sanitation programming and prepare for implementation of CLTS and sanitation marketing interventions (World Bank 2015). The World Bank TSSM program, which also operated in Indonesia, similarly featured a strong emphasis on building local capacities to carry out CLTS programming and sanitation marketing within their respective districts (WSP 2009; Cameron, Shah, and Olivia 2013). TSSM also worked to strengthen the capacities of local government officials to conduct M&E activities, budget and plan for sanitation interventions, and foster ownership for local officials to improve sustainability post-implementation (WSP 2009).

Operating area-wide also requires implementers to plan for sustaining program results over time. Sustainability can be achieved through multiple pathways, including strong local government ownership, supporting investments in human and financial resources, and strengthening M&E systems. In addition to supporting government capacity building and reaching underserved communities mentioned above, SNV as a part of the SSH4A program tackled sustainability by coupling data from its own detailed monitoring framework with efforts to strengthen existing local government monitoring efforts (Apanga et al. 2021; SNV 2019b). The robustness of SNV’s M&E framework also allowed them to learn from past approaches as well as revisit the same areas 1–2 years after program implementation to assess sustainability of outcomes (Apanga et al. 2021). These learnings were then shared with local government stakeholders to encourage reflection and inform future program design (SNV 2019b). In Indonesia, TSSM also worked to strengthen local governments’ monitoring efforts by integrating community-based monitoring with existing government-run monitoring systems to collect more comprehensive sanitation data to better inform future program design and implementation (WSP 2009).

5.2 AREA-WIDE APPROACHES BY GOVERNMENTS

Insights on AWS also can be found in the experiences of (local) governments. While WASH policies and targets in many countries are often set at the national level, it is increasingly common for

subnational governments to bear responsibility for implementing and coordinating sanitation programming. This devolution of authority means that many local governments are already planning and implementing sanitation programming at an administrative level, be it provincial, municipal, district, or other local levels (Cobos Muñoz et al. 2017; Government of the Republic of Malawi 2018; Government of the Republic of Zambia 2019a; Government of Nepal 2011; Republic of Uganda 2015).¹⁶ Although AWS terminology has not been attached to this form of local-level governance and many local governments are not yet planning and programming for administration-wide universal coverage, there are examples of government-driven programs pushing for area-wide outcomes, and the mandates for local governments in sanitation programming often align to those of the AWS framework's key principles of scale, universal coverage, government leadership, and sustainability. The growing attention paid by DPs to local level capacity building and systems strengthening is also evidence that sector awareness has increased around this potential bottleneck to rural service delivery (Trancón, Boulouvar, and Tillett 2021; USAID 2021b; UNICEF 2016c).

The review team selected the eight country programs discussed below through consultations with sector experts and each program contains characteristics drawn from prevailing AWS frameworks in both program design and implementation. Although not all of the key principles of AWS are present in each case, governments have implemented these programs at scale and each incorporates integrated or tailored approaches/interventions that aim to meet local contexts and needs and broadly follow the key principles of AWS. The team reviewed them against the (1) scale of implementation, (2) equity and inclusion considerations and universality of coverage, (3) role of local government, and (4) factors that contribute to sustainability of outcomes. The assessed countries and programs consist of the following (with additional details provided in Annex B):

- **Nepal:** Sanitation and Hygiene Master Plan (2011–2015)
- **India:** Swachh Bharat Mission Grameen (SBMG: 2014–2025)
- **Indonesia:** Sanitasi Total Berbasis Masyarakat (STBM: 2008–present)
- **Philippines:** Philippines Approach to Sustainable Sanitation (PhATSS: 2019–present)
- **Uganda:** Second National Development Plan (NDP II: 2015–2020); Third National Development Plan (NDP III: 2020–2025)
- **Kenya:** Rural Sanitation and Hygiene Protocol (2022–Present)
- **Zambia:** National Rural Water Supply Sanitation Programme Phase 2 (NRWSSP II: 2019–2030)
- **Malawi:** National Sanitation and Hygiene Strategy (2018–2024)

It is noted that these government programs have received (financial and technical) support from a variety of DPs, and have contributed to shaping the AWS frameworks discussed in Section 4. While the latter three are examples of relatively new protocols, programs, or strategies that have either not yet or only to a limited extent started to be implemented, they were nonetheless included in the review as examples of new directions taken by governments, based on sector learning and experiences, that incorporate the AWS principles and direct implementation of future AWS programs.

¹⁶ However, devolution of authority alone will not guarantee the adoption of an AWS framework. The decentralization of sanitation responsibilities without also providing local governments with the proper capacity, resources, and support needed to implement area-wide programming will not constitute AWS as this will remove the ability for local governments to program at scale, with coverage for all, and with sustainability in mind toward universal access to SMSS.

Government-led sanitation efforts are characterized by national-level prioritization and resource allocation combined with decentralizing sanitation programming and governance to the local levels. In Africa, Kenya, Malawi, Uganda, and Zambia, implemented national policies and programs guide local government-led sanitation programming (Robinson 2022; Government of the Republic of Malawi 2018; Government of the Republic of Zambia 2019a; Republic of Uganda 2015; WHO and UN-Water 2019). Uganda stands out as a prominent example of national government support for districts leading sanitation programming through the development of its district-wide WASH frameworks that include district-specific targets, expansion plans for sanitation services, and partnership strategies with private sector actors and other NGOs (Keesiga 2018; Kabarole District Council 2018). Prioritization at the national level with the 2015 Second National Development Plan (NDP II) established national targets and a diverse toolkit of interventions, including CLTS, MBS, broader private sector engagement strategies, and an increase in water infrastructure—all emphasized with responsibility on local governments to implement (Republic of Uganda 2015). This effort is supported by national financing directed toward district WASH-sector budgets that include specific allocations for sanitation programming (Kabarole District Council 2018). Additionally, in noting lessons for conducting CLTS at scale, a GSF case study of the Uganda Sanitation Fund highlights how combining national and local government engagement “allows for greater support and supervision, flexibility, dynamism, and context-specific planning at the local level” (England et al. 2017, 8).

Governments also are central to ensuring that sanitation policies and programs include hard-to-reach and in-need populations. One of the more documented cases of a national government-driven AWS is Nepal, which eliminated OD nationwide in 2019 with upwards of 99% of the population gaining access to a toilet (Secretariat of National Sanitation and Hygiene Coordination Committee 2020; UNICEF 2020b). As described in more detail in Box 3, targeting the country’s last-mile populations in the Terai region required tailored solutions where poverty was prevalent alongside strong cultural norms of OD (WSSCC 2019b). External partners, including SNV and the GSF, helped adapt and operationalize the national approach to sanitation and distributed targeted subsidies in tandem with behavior change interventions to design programming best suited for local cultural norms and geographic features (i.e., prone to flooding) (WSSCC 2019b). This is similar to India and Zambia, whose respective plans and programs also mention tailoring interventions and adapting approaches based on an area’s physical context (e.g., climate, geography) as well as economic and social contexts (e.g., socioeconomic makeup and other demographic shifts) (UNICEF 2020a; Government of the Republic of Zambia 2019a). Other examples including Malawi and Indonesia have integrated gender and inclusion of marginalized groups in local sanitation programming and policies by leveraging support from national-level ministries and departments, although little information is available on how these partnerships are implemented on the ground (Government of the Republic of Malawi 2018; World Bank 2016).¹⁷

Government plans and programs have also allocated resources to promote the sustainability of sanitation gains and mitigate slippage. In Nepal, as a part of the Sanitation and Hygiene Master Plan, local governments created community funds for sanitation and hygiene promotion that were supported by national government funding and DP contributions (Government of Nepal 2011). These community funds were mobilized through various support mechanisms, including reward recognitions, revolving funds, and incentives to local governments to reach ODF status. In the Philippines, sustainability of program results is promoted through the establishment of local government knowledge-sharing networks. As a part of the PhATSS program, local government agencies (e.g.,

¹⁷ However, GESI integration into sanitation programming does not necessarily equate to the universal coverage principle of AWS whereby vulnerable and marginalized groups are intentionally targeted from the beginning to ensure area-wide outcomes are achieved by all; in the cases of Malawi and Indonesia, this references the prioritization within policy of marginalized groups, but a lack of specificity around the implementation of those aims, or the resources, tools, and partners to be used.

provincial, city, and barangay LGUs) carried responsibility for coordinating with relevant stakeholders (e.g., national government agencies, other local governments) to share learnings from implementation and best practices to inform future program design (Republic of the Philippines 2019). In India, incentives and positive cultural reinforcement encourage sustainability. The SBMG program recommends that local governments plan regular celebrations or other incentives to achieve and sustain ODF status. These celebrations have included monthly “Walk of Pride” events that occur for the first nine months after ODF certification or yearly celebrations around the anniversary of ODF certification. These events help portray ODF certification as a “socio-cultural achievement” for people to continue to practice positive sanitation and hygiene behaviors and endeavor to mitigate slippage (Government of India 2018).

Box 3. Achieving Nationwide ODF in Nepal

Nepal is regarded as one of the most successful case studies of achieving nationwide ODF status through national government coordination and leadership, strategic use of partnerships for last-mile communities, and strength of local government implementers in achieving universal coverage. In 2011, the Government of Nepal kickstarted these efforts with the release of its Sanitation and Hygiene Master Plan (SHMP), aiming to achieve universal access to sanitation and eliminating OD nationwide. The plan encouraged a demand-driven and BCC-focused approach, utilizing CLTS and IEC materials and trainings to achieve ODF at the district level, and was generally anti-subsidy. However, the plan allowed for the development of “locally appropriate support mechanisms” for poor and vulnerable populations, including the use of targeted subsidies (WSSCC 2019b; World Bank 2019; Government of Nepal 2011). This exception was notably utilized in the Terai region, a historically poor and culturally distinct region where behavior change programming alone was insufficient to achieve district-wide ODF status (WSSCC 2019b). To reach these last-mile populations, the Nepalese government collaborated with implementation partners, including SNV, GSF, WaterAid, UNICEF and others, to help **implement targeted interventions (including subsidies) and broader systems strengthening efforts** (SNV 2018; WSSCC 2019b). In the Terai region, these partnerships and tailored interventions helped to increase sanitation coverage by nearly 86 percentage points from 13% in 2013 to 99.5% by mid-2019 (WSSCC 2019b).

One of the main elements of the plan was its heavy focus on **localizing the financing and implementation of sanitation programming**. District- and village-level development committees operated as the main entity in designing, implementing, and monitoring sanitation programming at the local level, supported by allocated budgets from the national level and planning support from regional- and district-level WASH committees (Government of Nepal 2011). This included provisions for community funding that mobilized national government support to “ensure the access of poor, disadvantaged and marginalized groups to toilets and achieve ODF status in the given area” (Government of Nepal 2011, 6). To facilitate cooperation across administrative levels, the plan outlined coordination mechanisms and clear roles and responsibilities for all stakeholders involved (Government of Nepal 2011). Focusing on local contexts and empowering local government committees allowed them to “lead the process, mobilize local government budgets, coordinate partners’ support and achieve tailored solutions to reach the vulnerable” (World Bank 2019).

The plan also had a **strong emphasis on adaptive management**. When an SNV payments-by-results program found that combining CLTS with sanitation marketing and BCC interventions proved ineffective at helping some Terai districts achieve ODF status, adaptations were made to the approach. These changes included modifications to previous CLTS programming, the introduction of partial sanitation subsidies, and addressing cultural and behavioral barriers to sanitation uptake by involving local facilitators (WaterAid 2019). Knowledge sharing and learning between local governments also prominently featured in the plan, with local governments and other organizations receiving regional- and district-level rewards for reaching sanitation targets. This rewards system allowed for recognition of successful approaches used by local governments and the sharing of best practices for others to potentially adopt (Government of Nepal 2011; World Bank 2019). By 2019, Nepal’s integrated, area-wide programming to achieve universal access to sanitation achieved nationwide ODF status and contributed to monumental gains in access across the country, particularly for vulnerable and marginalized populations.

While only a few of the above examples from DPs and governments encompass all four key principles of AWS, they all provide perspective into how the key principles have been applied and realized across contexts. For example, one key feature of those programs deemed successful in reaching their targets (e.g., Nepal, India, and SSH4A) consisted of a strong outcome focus, and strategic use of monitoring, learning, and adaptive management to reach those outcomes. As was also identified by WaterAid in its study of East Asian countries that had successfully “delivered sanitation within a generation” (Northover, Ryu, and Brewer 2016), a relentless focus on outcomes, such that learning and monitoring processes are put in place to continuously course correct and tweak implementation until achieving the goals, are key tools to operationalize the principles of scale, universal coverage, government leadership, and sustainability. Using the insights and documentation from Sections 3, 4, and 5, the following section outlines these and other key system elements and interventions identified to enable the implementation of area-wide programs and achievement of area-wide outcomes. These are proposed as the core components of an AWS framework.

6.0 CORE COMPONENTS OF AWS

In Sections 4 and 5, the review team analyzed early frameworks of AWS and implementation of AWS programming by DPs and governments to identify key principles and elements of AWS and inform the construction of an AWS framework. Guided by the principles of scale, universal and inclusive coverage, government leadership, and sustainability, AWS requires two sets of elements:

1. A range of **sanitation and hygiene interventions, products, and services** that are proven, available, adaptable to context and target populations, and can be combined to achieve the outcomes required in a given administrative area.
2. An **enabling environment** consisting of a set of institutions, actors, systems, and processes, jointly referred to as **system building blocks**, that can facilitate, support, and guide the implementation of the sanitation and hygiene interventions.

Starting with the enabling environment, this section will dive deeper into these two sets of elements and explore how they (are expected to) interrelate to deliver AWS successfully and sustainably. Following the presentation and discussion of the system building blocks and interventions, Figure 1 presents a draft ToC that describes how these individual components come together to help achieve AWS outcomes across contexts and to reach universal coverage for all. However, several important assumptions are made which will require additional research, including better understanding the hierarchy of importance of these elements—collectively referred to as the “core components”—and the order in which they should be implemented.

6.1 THE ENABLING ENVIRONMENT AND SYSTEM STRENGTHENING

The team’s review of AWS frameworks and experiences references the importance of system strengthening as a means of creating the broad enabling environment required to deliver AWS. **The institutional and systems components that need to be in place (and strengthened) to reach universal access to SMSS and basic hygiene (i.e., the end goal of AWS) have already been suggested in various sector frameworks, many of which are applicable to AWS.** Table 4 provides a brief overview of some of the most prominent frameworks and models. Many of their components align with the AWS frameworks and programs discussed above, framed around the SDG targets, universal access, leaving no one behind, and system strengthening. UN Water’s SDG 6 Global Acceleration Framework and SWA’s Building Blocks and Collaborative Behaviors frameworks are aligned to specific outcome targets: UN Water’s framework is tied to the SDG targets, specifically SDG 6.2 on universal coverage; and SWA’s frameworks are likewise tied to universal access to (sustainable) sanitation services. UNICEF’s enabling environment strengthening framework operationalizes the building blocks to support countries in strengthening the enabling conditions required to achieve the SDG 6.2 target. The FIETS sustainability model focuses on the structural dimensions of sustainability to ensure that outcomes can be sustained over time and, importantly, after external intervention or support has ceased.

TABLE 4: COMPARATIVE SYSTEM FRAMEWORKS

ORGANIZATION	FRAMEWORK /MODEL	COMPONENTS
UN Water	SDG 6 Global Acceleration Framework	The framework puts forth “five accelerators” to significantly improve countries’ progress toward SDG 6, including (1) optimized financing, (2) improved data and information, (3) capacity development, (4) innovation, and (5) governance.

TABLE 4: COMPARATIVE SYSTEM FRAMEWORKS

ORGANIZATION	FRAMEWORK /MODEL	COMPONENTS
SWA	Building Blocks ¹⁸	The building blocks “capture the key elements that the sector must have in place to be able to deliver sustainable services and progressively eliminate inequalities in access,” including (1) sector policy strategy, (2) institutional arrangements, (3) sector financing, (4) planning, monitoring, and review, and (5) capacity development (SWA n.d.a.).
SWA	Collaborative Behaviors	The collaborative behaviors “can improve the way that [countries and their partners] work together to improve the long-term sector performance needed to deliver sanitation, hygiene and water for all, everywhere and forever,” including (1) enhancing government leadership of sector planning processes, (2) strengthening and using country systems, (3) using one information and mutual accountability platform, and (4) building sustainable water and sanitation sector financing strategies (SWA n.d.b.).
WASH Alliance	FIETS Sustainability Model	The model identifies five key areas of sustainability to ensure that sanitation outcomes are maintained over time, including (1) financial sustainability, (2) institutional sustainability, (3) environmental sustainability, (4) technological sustainability, and (5) social sustainability.

There are a number of common system elements that enable AWS and are largely aligned with the components listed in the frameworks in Table 4. These system building blocks include a mix of systems, capacities, and processes that can jointly enable local governments and their partners to implement sanitation and hygiene interventions and services in such a way as to achieve area-wide outcome targets.

6.1.1 NATIONAL AND SUBNATIONAL SYSTEM BUILDING BLOCKS OF AWS

The experiences examined in this desk review indicate that for AWS to successfully move countries toward their national targets, it needs to be driven nationally as well as locally. While the team acknowledges that based on levels of (de)centralized governance the exact roles of and relationships between national and subnational governance structures will differ, by and large, national building blocks enact a strong enabling environment that provides direction, resources, and oversight to local governments. Subnational system building blocks then enable local government leadership to implement area-wide programming and oversee the resourcing, partnerships, and coordination required to achieve and sustain area-wide service delivery.

Based on the desk review, the proposed system building blocks for AWS include:

- **National system building blocks:**
 - **Sector policies and strategies:** This includes national policies, strategies, and an overarching M&E framework. In the above case studies, roles, responsibilities, and high-level objectives are most clear in countries with national-level sanitation policies that focus on area-wide inclusive achievement of time-bound targets. Additionally, national M&E frameworks set measurable achievement targets that inform the development and tailoring of local-level interventions.
 - **Planning, monitoring, and financing:** Area-wide planning and programming must come with associated financing from the public and private sectors and DPs to provide sufficient resources to the institutions and stakeholders involved in sanitation service delivery (USAID 2020, Tillett and Smits 2017). Additionally, national-level tracking of implementation,

¹⁸ Other organizations have used the Building Blocks, including UNICEF’s guidance on strengthening the enabling environment for WASH (UNICEF 2016b).

- outcomes, and financing is critical for planning and can support efficient and equitable allocation of resources to areas most in need. National-level development of monitoring and reporting systems can also greatly affect how monitoring is undertaken at subnational levels.
- **Legislation, regulation, standards, and guidelines:** A supportive enabling environment for sanitation programming requires that legislation and regulations incorporate plans for safe containment from the beginning of sanitation programming. This ensures adequate public-sector resource allocations, guides sanitation targets and priorities, and encourages sector partnerships (WHO 2018). National-level guidelines support local governments in enactment and implementation of these legal frameworks and regulations. Yet, regulation on (informal, on-site) rural sanitation and hygiene is a notable gap, as confirmed in Eastern and Southern Africa Water and Sanitation (ESAWAS) (ESAWAS Regulators Association 2022).
 - **Capacity strengthening and technical assistance:** National-level governments and national-level training institutions, often with support from DPs, provide technical guidance and HR for capacity building of local governments and implementers to ensure sufficient capacity to lead and carry out sanitation programming. National governments also provide technical assistance to local governments on selection, design, and implementation of sanitation programming, including through testing promising solutions or new approaches.
 - **Functioning market systems:** National government actors through the above building blocks can create an enabling business environment, but beyond this, successful implementation of AWS will require market systems, supply chains, and providers (e.g., of cement or other building materials) that often stretch beyond the boundaries of an administrative area. Functioning market systems require coordination and collaboration between public and private actors, often with support from DPs.
- **Subnational system building blocks:**
 - **Planning, budgeting, and financing for full coverage:** With national policies and strategies in place, localized situational and cost assessments provide pathways for both efficient utilization of resources and prioritization of the most vulnerable. In addition to funding the governance infrastructure behind AWS, local-level public funding is also needed to ensure continuity of interventions and services (e.g., subsidies to households, and support or (financial) incentives to sanitation enterprises), and rewards or incentives to local governments to sustain sanitation gains (USAID 2020).
 - **Local level regulation, standards, and guidelines:** Minimum regulatory standards and local by-laws are needed to provide clear direction and expectations for implementation at the local level. These standards apply to both public and private service providers working at the local government level (WHO 2018).
 - **Capacity and HR:** The shift to local government leadership in sanitation programming necessitates that local government actors have the knowledge, skills, and abilities to contribute to the design, implementation, management, monitoring, and budgeting of sanitation programs. This includes capacity needs assessments, training and skills development, and job creation in the water and sanitation sector that is supported by both the national government and non-governmental partners.
 - **Political will and ownership:** Local government leadership requires that local champions are committed to supporting sanitation programming with political, financial, and HR, and create a local enabling environment for sanitation (UNICEF 2019). Local-level accountability

mechanisms and incentives are also needed to ensure that champions and politicians prioritize and deliver on sanitation activities and outcomes.¹⁹

- **Institutional arrangements and partnerships:** Structured partnership agreements are needed to coordinate efforts and resources across stakeholders. This includes coordination mechanisms for both internal and external partnerships with DPs and the private sector, defined roles and responsibilities across government departments, and established accountability mechanisms tied to area-wide outcomes.
- **MEL:** Robust M&E systems are needed to effectively track sanitation outcomes, inform intervention planning and service delivery, and share learnings across partners and contexts (WaterAid 2019; World Bank 2019). In addition, building feedback loops that allow for learning and improvement on internal processes, including stakeholder capacity and resources, can also strengthen local governments in their implementation capacity (World Bank 2019).

6.1.2 CROSSCUTTING PROCESSES

For these system building blocks to be in place and actively applied to support AWS outcomes, AWS programs will generally require a focus on system strengthening. This could be seen as a crosscutting process within an AWS framework. Planning and policy support, capacity building, investment in physical systems building (e.g., for M&E) and strengthening of institutions that oversee and implement sanitation programming are needed to build and sustain the individual capacities, sector resources, and systems required to facilitate area-wide implementation. System strengthening also includes activities to increase commitment and strengthen local leadership and ownership of sanitation goals and targets, such as through institutional triggering or cultivating local leadership behaviors (WSSCC 2016b; Bartell et al. 2020). Another example is national-level capacity support and a focus on learning and diffusion for national level scale, such as through facilitation of peer-to-peer learning between subnational governments. Taken together, system strengthening processes and activities help ensure that subnational governments can carry out the financing, design, implementation, and monitoring of sanitation programming, and that all stakeholders involved in intervention and service delivery do so in a coordinated, well-planned, and context-appropriate manner.

Secondly, the outcome orientation of AWS requires a strong focus on adaptive management. In this review, the team defines “adaptive management” as the practice of local governments and implementing partners designing and adapting sanitation interventions and services and implementing course corrections over time and across contexts, as levels of access or vulnerability change for particular populations or as insights from MEL identify where specific interventions are not working, when new learnings arise, or when the needs of the targeted groups change. Sanitation interventions and services should be context-specific and adaptable, meaning that changes are expected, and course corrections are applied when needed (World Bank 2019; USAID 2020). Importantly, adaptive management strongly depends on data and the presence of solid, reliable M&E systems. But it may also require changes to broader systems, attitudes, and skills of (local) government staff and those engaging in service provision, for example to move away from strongly process-oriented reporting and incentive systems (where staff are expected to carry out tasks) to outcome-oriented systems (where staff are expected and incentivized to achieve results).

¹⁹ WaterSHED’s “Civic Champions” program in Cambodia is one successful example of local level leadership development for sanitation. The program designed and implemented a leadership training program that provided local commune level leaders with soft skills and leadership training to help build their ability to lead sanitation programming within their respective communes (Shah, Fogelberg, and Lockwood 2021). The Civic Champions program has shown promising results in growing local sanitation markets and increasing sanitation coverage (Bartell et al. 2020).

Lastly, all AWS principles, not just the principle of universal, inclusive coverage, rely on GESI mainstreaming. Integrating GESI considerations into all aspects of sanitation systems, institutions, and programming is necessary to ensure that vulnerable and marginalized populations are empowered to achieve their rights to sanitation, and essential to ensure they can sustain them. By integrating GESI into systems and institutions, local governments can build policies, programs, and guidelines that are responsive to local-level GESI considerations. This also includes GESI-sensitive financing²⁰ measures to ensure that resources are devoted to support achievement of area-wide outcomes for the most disadvantaged, as well as GESI mainstreaming and systematic engagement of vulnerable and marginalized populations throughout the program cycle. In implementation, this may include partnerships with non-WASH, rights-based organizations to incorporate rights-based principles in sanitation programming (Water for Women 2022).

6.1.3 IDENTIFIED KNOWLEDGE GAPS

For each of the AWS building blocks and cross-cutting processes identified above, there are important knowledge gaps on how they should best be implemented to reach the SDG targets specifically and area-wide outcomes more broadly. Table 5 summarizes the key knowledge gaps that emerged from this review and consultations with informants, focusing in particular on the subnational level building blocks and the cross-cutting processes, and on questions that can serve as a starting point for future implementation research. Some of these will be further discussed in Section 7.

TABLE 5: SUMMARY OF KNOWLEDGE GAPS LINKED TO SYSTEMS AND PROCESSES	
SYSTEM BUILDING BLOCK	IDENTIFIED KNOWLEDGE GAPS
Planning, budgeting, and financing for full coverage and service delivery	<ul style="list-style-type: none"> The depth, detail and feasibility of localized situational and cost assessments and planning exercises versus centralized assessment and planning exercises Sources of sustainable financing for the building blocks, interventions and service delivery, and the relationship between national and local level planning and budgeting processes Understanding of (planning for) safely managed sanitation service delivery requirements, technologies, and processes
Local level regulation, standards, and guidelines	<ul style="list-style-type: none"> Appropriate regulation, standards, guidelines, and enforcement mechanisms specific to SMSS and FSM in different rural contexts GESI implications of regulation and local by-laws, and the right balance between regulation and support for vulnerable population groups
Capacity and HR	<ul style="list-style-type: none"> The amount and types of jobs, staff, and skills required to sustainably address SMSS and basic hygiene at area-wide levels Appropriate, affordable, and sustainable mechanisms to strengthen sanitation workforce capacity at area-wide level, across entire countries
Political will and ownership	<ul style="list-style-type: none"> The exact impact of and causality between (local) political will and leadership and strengthening of the other systems and processes, budget allocations, implementation of interventions, and achievement of area-wide outcomes The role, effectiveness, and potential impact of different strategies to advocate for and promote AWS programming
Institutional arrangements and partnership	<ul style="list-style-type: none"> Effective, inclusive mechanisms for multi-stakeholder coordination and accountability Effective partnering modalities between public and private sector and between governments and DPs The implications and impact of formalizing the informal sector and large-scale use of volunteers

²⁰ This may include, for example, gender responsive budgeting (GRB), which analyzes government budgets for their implications on gender equality and supports budgetary revisions to ensure that government resource allocations support equitable outcomes, including reaching the SDG 5 targets for gender equality and women’s empowerment. See [“A Guide to Gender-Responsive Budgeting”](#) (Stephenson, Mary-Ann 2018). For more recent efforts to integrate social inclusion into GRB, see [“Manual on Gender Equality and Social Inclusion and Gender Responsive Budgeting”](#) (Nepal Administrative Staff College 2019).

TABLE 5: SUMMARY OF KNOWLEDGE GAPS LINKED TO SYSTEMS AND PROCESSES

SYSTEM BUILDING BLOCK	IDENTIFIED KNOWLEDGE GAPS
MEL	<ul style="list-style-type: none"> Type of data, factors, systems, processes, and tools that can enable local governments to effectively and sustainably undertake outcome-oriented M&E and adaptive management to achieve and sustain area-wide sanitation
System strengthening	<ul style="list-style-type: none"> Effective engagement of DPs and national governments in local systems strengthening Potential sequencing and prioritization of system building blocks and systems strengthening interventions, and sequencing with sanitation and hygiene program interventions
Adaptive management	<ul style="list-style-type: none"> Current use and practices of adaptive management in local government sanitation plans and programs Required changes and effective tools and guidance to strengthen flexibility and adaptive management in local governments' and implementers' structures, planning, and implementation
GESI mainstreaming	<ul style="list-style-type: none"> Effective implementation or adaptation of sanitation and hygiene interventions to reach unreached, vulnerable and/or marginalized populations to reach AWS outcomes Effective engagement of marginalized and vulnerable populations in AWS planning, implementation, monitoring and evaluation to understand their barriers, needs and concerns and implement targeted programming Appropriate prioritization of vulnerabilities or risks linked to population groups across administrative areas to inform allocation of programming resources/planning of interventions

6.2 INTERVENTIONS UNDER AN AWS FRAMEWORK

AWS as a framework is intended to encompass a host of interventions that are coordinated over a given administrative area to achieve a predefined set of area-wide outcomes. As such, the mix of interventions will be context dependent and subject to the needs of target populations, resources at the disposal of implementers, and local geographic context (e.g., rural mixed, rural on-road, rural remote and difficult contexts,²¹ along with small towns and peri-urban areas). In addition to interventions that address and strengthen system building blocks, sanitation and hygiene interventions will also include many of the same approaches outlined in Section 2 and discussed in “Guidance on Programming for Rural Sanitation” (WaterAid 2019), applied in a way that is fit-for-purpose and driven by local contexts and evidence (to the extent possible given evidence gaps in the sector):

- **Community mobilization, demand creation, and behavior change:** e.g., CLTS, School-led Total Sanitation, SBC
- **Supply side interventions:** MBS/sanitation marketing, market development, and supply chain strengthening
- **(Financial) support mechanisms:** household hardware financing (loans) and subsidies, financial support to sanitation enterprises, community/government incentives, communal (construction) support mechanisms, inclusive engagement, and decision-making processes
- **GESI mainstreaming:** activities intended to strengthen GESI in sanitation and hygiene programming and outcomes, including those linked to strengthened engagement, empowerment, and shifts in norms, stigma, and power dynamics

Importantly, being able to combine, adjust, and apply interventions in a way that is context-sensitive and responsive to differing vulnerabilities and needs, implies that those proven approaches and interventions exist, are present, and can be implemented in a given administrative area. This is an assumed but essential precondition for successful implementation of

²¹ These are categorizations for rural areas as defined by WaterAid (WaterAid 2019).

AWS programming, yet not always a given. Approaches and interventions (tools/processes/protocols/business models/toilet systems, etc.) will still need to be tested and operationalized, or even designed and developed, for a given area or context, before being able to apply or adapt these within a larger area under AWS. This requires the presence of service providers or implementing partners with the HR, skills, and abilities to perform this design, testing, or operationalization, and information on factors such as intervention performance, modalities, population fit, and costing. If there are no proven, tested, and existing sanitation and hygiene interventions, the design and planning of an AWS program needs to carefully factor in the need for processes to develop and localize these interventions, alongside the other system strengthening activities outlined in Section 6.1.

Secondly, sanitation and hygiene interventions and services may not be well-aligned with implementation across only one administrative area. This is particularly true for MBS, which involves national market system supply chains and critical mass/scale for viability and may not be confined to administrative borders. But equally, SBC and norms change interventions and CLTS roll-out strategies (including verification and certification protocols and processes) would typically (and more cost-effectively) be designed and developed for (national) scale and for most of the population, before they then could be adjusted for specific contexts or population groups within a given administrative area. As was touched on in Section 6.1, this likely requires a broader, national-level approach to planning and structuring of such sanitation and hygiene services and interventions, and possibly also to the types of context and data analysis required to inform effective AWS across multiple administrative areas.

Lastly, there are numerous knowledge gaps on how to mix, phase, and sequence sanitation and hygiene interventions. This includes questions about effectiveness and efficiency (for example, the application of sanitation subsidies linked to the presence of good product systems and functioning markets), but also about coordination, skills and capacities, and roles and responsibilities (for example, the use of community mobilizers as MBS sales agents).

6.3 DEVELOPING A THEORY OF CHANGE FOR AWS

Figure 1 presents a draft narrative ToC for AWS in the form of a series of if/when statements that outline the core components of AWS, as well as an assumed sequence of these components to arrive at the desired AWS outcomes. This draft ToC is intended as a reference for further dialogue and research into AWS implementation. Given that the team did not feel that sufficient evidence currently exists to inform such level of detail, it does not present detail on the precise interaction, causal links, and change pathways between the different building blocks and interventions, nor is it meant to represent an implementation framework. Instead, some of the key assumptions shaping this ToC are presented below, and then Section 7 outlines some of the proposed priorities for future research. As such, it is expected that these causal links, change pathways, and underlying assumptions will be explored in future research and this ToC will be updated accordingly.

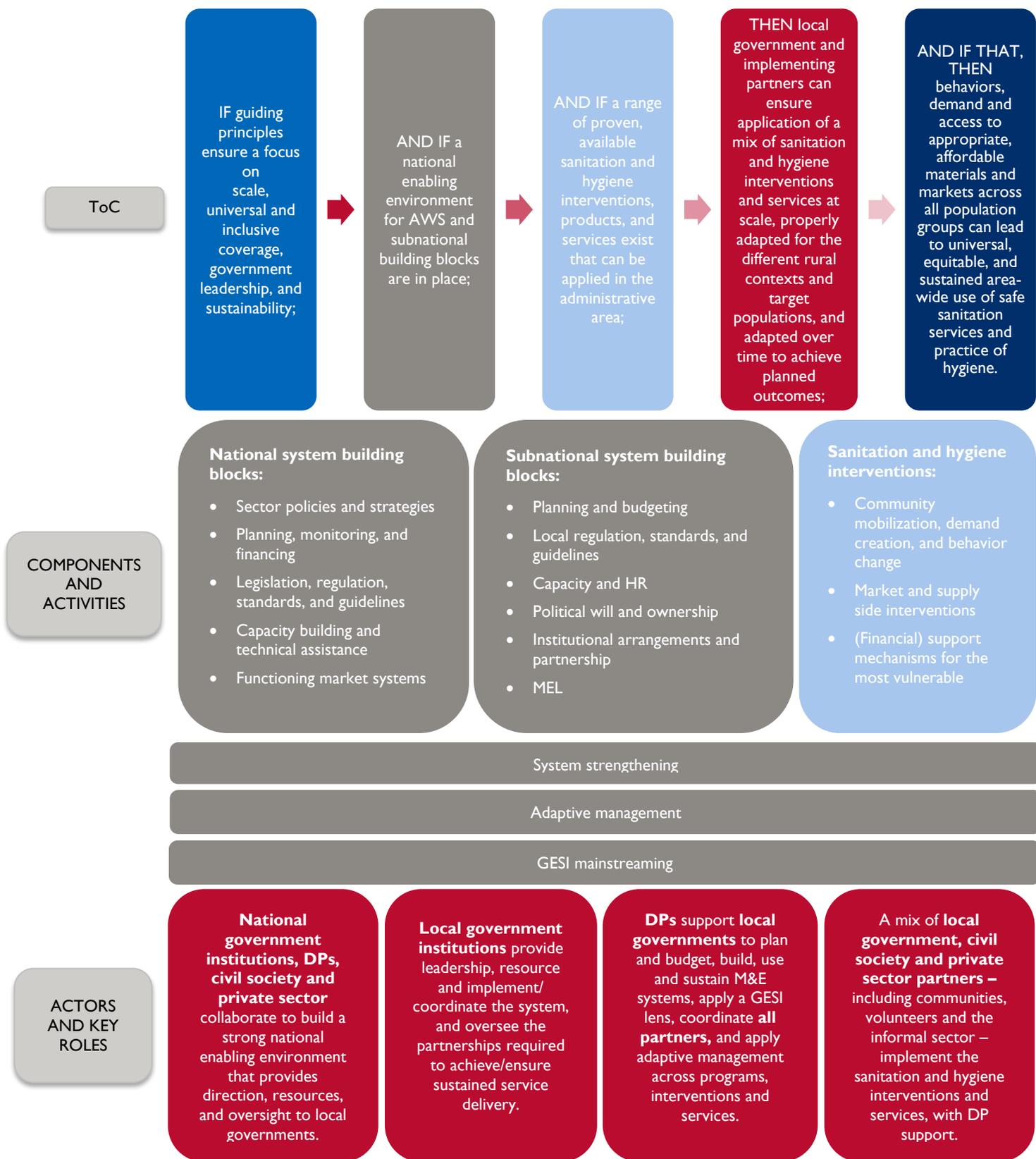


Figure 1: Draft ToC for AWS

The first assumption of this ToC is that successful AWS requires a minimum set of national-level system building blocks. As discussed, not only are subnational building blocks and local governments informed by and to an extent dependent on national policies, guidance, funding, and systems, but successful implementation of sanitation and hygiene interventions within an administrative area also requires the broader enabling environment and market systems for the delivery of those interventions and services.

A second implied assumption in the way the TOC is currently structured is that all system building blocks are of equal importance to enable successful AWS. However, this requires further research. The studies and cases discussed in this desk review indicate that local level leadership and political will is a key prerequisite to making many of the other building blocks happen. Also, sequencing of system strengthening interventions may be important, and it is likely that area-wide programming can and will start while work to strengthen certain building blocks is still underway, for example national and subnational M&E systems and tools and local human resource capacity. In this light, it is interesting to note that the CWIS principles discussed in Section 3.2.3 have informed a CWIS service framework that focuses on strengthening the design and implementation of three core public system functions: responsibility, accountability, and resource planning and management (CWIS, n.d.). Translating this to our ToC, assigning clear responsibility and ensuring accountability would link to institutional arrangements and partnership; accountability requires strong MEL; and resource planning and management would translate to planning and budgeting, but also highlight the importance of adaptive management. Given that CWIS as a sector concept and framework is arguably some years ahead of AWS in how it has been actively informed by systematic learning, evidence-gathering and reflection, this may give some pointers to a possible further prioritization of building blocks and systems strengthening efforts in AWS as well.

Thirdly, this ToC assumes that different implementing partners are willing to coordinate on the design and implementation of sanitation and hygiene interventions and service delivery activities, and that there exists an initial level of partnerships in place to facilitate the required interactions to enable AWS. While partnership itself is considered a building block and partnering and institutional arrangements can be strengthened along the way, a common starting point and willingness to engage is a prerequisite.

Lastly, the ToC assumes that AWS partners can adapt proven sanitation and hygiene approaches and interventions that exist for the majority of the population in an area to reach other, unserved and/or hard to reach population groups, and that through an adaptive management approach, they will actively verify if the interventions are reaching all those targeted, and continue to adapt approaches until they do. This is possibly the biggest assumption to unpack in future research, as the “how” of this adaptive way of working, implementing different interventions, and offering differentiated services across geographical areas—based on income levels, remoteness, prevailing social norms, or other socio-economic factors—harbors within it a high level of potential complexity, but needs to be feasible within resource- and capacity-constrained contexts typical of many rural areas in low-income countries.

7.0 KEY TAKEAWAYS AND AVENUES FOR FUTURE RESEARCH

Below the review team summarizes the key takeaways from the desk review and discuss the ongoing challenges to implementing area-wide approaches. This section also looks ahead to what new avenues of research USAID may undertake to illuminate some of these knowledge and evidence gaps.

7.1 KEY TAKEAWAYS

Existing framework definitions and documented experiences of AWS point to a set of core defining principles, building blocks, and interventions. Commonalities in existing AWS frameworks and tools point to four key AWS principles: (1) working at scale, (2) aiming for universal and inclusive coverage, (3) placing governments in the lead, and (4) prioritizing sustainability. These principles are increasingly incorporated into sanitation programs and policies from both DPs and national governments. The adoption of these principles across contexts in Africa and Asia reflects the broader sectoral shift for achieving greater and more sustainable results at scale.

Documented cases of AWS in practice remain limited, and of those that are available, few align with or have implemented all principles, building blocks, or interventions. This is partly context-specific as not all aspects are equally relevant in all contexts, but largely due to the wide-spanning requirements of AWS that encompass both national and subnational building blocks and a host of sanitation and hygiene interventions, all supported by the four key principles. This presents challenges in analyzing implementation of specific case studies and drawing broader lessons across cases. Available resources lack sufficient detail or do not document all program aspects (and outcomes) that are needed for a more in-depth critique of their approaches. For example, many of the government case studies used in this desk review come from national-level plans and policies (e.g., Kenya, Malawi, Philippines, Uganda,²² and Zambia), which are of limited value for understanding how these plans are implemented at the local level and whether (or by how much) they retain the key principles of AWS. For DP programs, while they play a significant role in helping to operationalize government plans and strengthen local government capacity for implementation, the extent to which they are donor-driven rather than supporting government-led sanitation efforts is not always clear. This has implications for sustainability of outcomes and services, which need to be further understood.

The frameworks and documented cases of AWS implementation can inform the development of a preliminary ToC for AWS. The ToC presents the core components of AWS—its national and subnational system building blocks, cross-cutting processes, and relevant sanitation and hygiene interventions—and how they come together to achieve area-wide outcomes. The review team notes that implementation of the various AWS components will differ at the local level where context, resources, stakeholder capacities, and baseline sanitation coverage vary. The components are also impacted by a broader sector focus on system strengthening, and there are ongoing efforts to strengthen national policy environments, improve sector planning, monitoring and coordination, and increase available financial resources for rural sanitation and hygiene. While the ToC does not currently reflect the causal pathways that connect these components, it can be used to ground further dialogue and research into AWS implementation.

The findings from the desk review represent a review of the available literature that can inform the sector's understanding of AWS. Likewise, given the limited documentation available, the research and case studies included should not be viewed as a collective body of area-wide approaches and interventions. However, this desk review has brought greater clarity around AWS as a

²² The team reviewed two district-level sanitation planning resources for Uganda in addition to NDP II and NDP III, but it remains unclear how donor-driven these individual plans were or how broadly utilized these approaches are in other districts. Similarly, the national plans do not reference or endorse these approaches.

framework for rural sanitation and hygiene and has helped to identify key knowledge gaps and areas for further research.

7.2 PRIORITY AREAS OF FUTURE RESEARCH

Several areas of implementation research can further contribute to sector learning and understanding around AWS. These are summarized below.

- **Implementing AWS core components.** Although this desk review identifies a set of building blocks, processes, and interventions commonly part of AWS implementation, understanding how to effectively develop and strengthen these core components across contexts to support the achievement of area-wide outcomes requires further documentation of experience. The building blocks and specific sanitation and hygiene interventions required for AWS will vary by context as the policies, laws, institutions, stakeholders, and preexisting sanitation status also differ. As such, the “how” of designing and implementing AWS is a key outstanding question in operationalizing this approach, where more evidence is needed. This includes, for example:
 - How to undertake context analysis and what key parameters to assess to inform AWS planning and implementation
 - How to effectively implement integrated (sequenced, phased, and parallel) sanitation interventions
 - How to ensure sustained service provision over time
 - Which target populations to reach first

The sector needs greater documentation, reflection, and learning at the global level to better understand the implementation of area-wide programming and the emerging lessons and best practices to replicate across contexts.

- **MEL and adaptive management.** Implementing a multitude of interventions at scale, for different target populations, and with different implementing partners and agencies requires a significant amount of data and HR capacity and skills to ensure that the solutions designed and implemented reach their intended beneficiaries. This places a large burden on local (and often resource-constrained) governments to accurately monitor both the inputs and services provided as well as the resulting sanitation and hygiene access and use, and to use that information to improve programming and foster sustainability of outcomes. However, there is a risk that implementing overly sophisticated M&E systems that are beyond the capacity and resources of local governments will become unsustainable without significant and continuous support. Some DP programs contributed significant investments in MEL and worked with (local) governments to ensure in-depth, highly disaggregated, and regular data collection on a variety of sanitation and hygiene processes and outcomes, with an eye on the principles of scale, sustainability, and government leadership. However, the sector needs to better understand the elements constituting effective, realistic M&E to make the key decisions in the drive to achieve and sustain area-wide universal service delivery. The challenge for local governments is twofold: (1) How can existing local government monitoring systems be strengthened to sustainably collect required data for AWS (and to use that information to further improve and adapt)?, and (2) How can these practices and systems be set up within local governments and in resource-constrained, rural, and remote settings?

- **Planning for safe containment and management of waste.** The goal of AWS is to move households as quickly and sustainably as possible toward SMSS, which requires investments in safe containment and FSM. Only 44% of the global rural population has access to SMSS, leaving over 1.9 billion people without access (UNICEF-WHO JMP 2021). Not only do improved sanitation systems sometimes fail to safely contain excreta or treat it in-situ, solutions for removal, transportation, treatment, and disposal/reuse are needed that are accessible to rural populations (Kolsky, Fleming, and Bartram 2019). Increasing access to rural SMSS will require long-term thinking and planning from policymakers to address safe containment and FSM, as well as a host of other recommendations identified by Robinson and Peal (2020), which require further research and documentation on how best to implement them. These include:
 - Improved monitoring of SMSS
 - Keeping waste in the ground as long as possible (as a method of safe treatment)
 - Testing new and communal opportunities for emptying and disposal such as burying and trenching
 - Addressing unsafe excreta return before containment (e.g., unsafe child excreta disposal, returns to OD)²³
 - Addressing viable infrastructure and business models for FSM in rural areas
 - Using non-market technical support to upgrade unimproved toilets (where MBS has not yet reached people)
 - Raising awareness of the needs, suitable options, and risks associated with SMSS
- **Ensuring GESI outcomes.** There exist numerous resources and guidance materials that are devoted to improving access to and use of sanitation services for women and girls or for certain vulnerable groups. However, what remains unknown is when and how (in terms of both timing and prioritization) to include specific GESI considerations or elements in interventions or approaches under an AWS framework. As GESI-related barriers to sanitation are highly context dependent, so too are the approaches needed to address and remove them. Whether certain groups should be addressed first, how much attention should be given early on to “low hanging fruit” versus immediate prioritization of the most remote/marginalized, or how to weigh the prioritization of vulnerabilities across groups to best allocate programming resources requires further study. So too does the effective inclusion of women and girls and other potentially disadvantaged groups in communal/area-wide decision making, and the design and application of appropriate policies, strategies, and regulation that effectively stimulate GESI.

²³ The theme of hygienic environments and SBC, including child feces management, are further explored in [“Toward a Hygienic Environment for Infants and Young Children: Limiting Early Exposures to Support Long-Term Health and Well-Being”](#) (USAID 2022).

REFERENCES

- ADB (Asian Development Bank). 2021. “Citywide Inclusive Sanitation Guidance Note: What is Citywide Inclusive Sanitation and Why is It Needed?” <http://dx.doi.org/10.22617/TIM210395-2>
- Adhikari, Kamal, Bharat Adhikari, Sue Cavill, Santosh Mehrotra, Vijeta Rao Bejjanki, and Matteus Van Der Velden. 2021. “Monitoring Sanitation Campaigns: Targets, Reporting and Realism.” Institute of Development Studies (IDS). *Frontiers of Sanitation: Innovations and Insights* 18. <https://sanitationlearninghub.org/resource/monitoring-sanitation-campaigns-targets-reporting-and-realism/>
- Agarwal, Rishi, Akshay Kohli, Subhash Chennuri, and Marion W. Jenkins. 2020. “Global Assessment of Grant-Funded, Market-Based Sanitation Development Projects.” *Waterlines* 39 (2 and 3): 144–165. <http://dx.doi.org/10.3362/1756-3488.19-00018>
- AMCOW (African Ministers’ Council on Water). 2015. “The N’gor Declaration on Sanitation and Hygiene.” https://www.ircwash.org/sites/default/files/ngor_declaration_print_version.pdf
- . 2021. “African Sanitation Policy Guidelines.” https://www.ircwash.org/sites/default/files/amcow_2021_african-sanitation-policy-guidelines.pdf
- Amokwandoh, Mercy, Theodora Akorfa Kunyegbe, and Veronica Ayi-Bonte. 2020. “Identifying Barriers to Inclusion in WASH.” Watershed. https://watershed.nl/wp-content/uploads/sites/2/2020/12/084-202013Ghana_SocialInclusiondefWEB.pdf
- Andres, Luis A., Michael Thibert, Camilo Lombana Cordoba, Alexander V. Danilenko, George Joseph, and Christian Borja-Vega. 2019. “Doing More with Less: Smarter Subsidies for Water Supply and Sanitation.” World Bank. <https://openknowledge.worldbank.org/handle/10986/32277>
- Apanga, Paschal A., Matthew C. Freeman, Zoe Sakas, and Joshua V. Garn. 2021. “Assessing the Sustainability of an Integrated Rural Sanitation and Hygiene Approach: A Repeated Cross-Sectional Evaluation in 10 Countries.” medRxiv. <https://doi.org/10.1101/2021.08.11.21261919>
- Bartell, Janita, Mimi Jenkins, Pav Vizintin, and Allison Salinger. 2020. “Civic Champions 2015-16 Scale-Up Evaluation.” WaterSHED. https://www.researchgate.net/publication/343175540_Civic_Champions_2015-16_Scale-up_Evaluation
- Brown, Francis Ato. 1992. “Sanitation Planning: A Challenge for the 90s.” World Bank and UNDP. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/421231468203674136/sanitation-planning-a-challenge-for-the-90s>
- Cameron, Lisa, Manisha Shah, and Susan Olivia. 2013. “Impact Evaluation of a Large-Scale Rural Sanitation Project in Indonesia.” The World Bank Sustainable Development Network Water and Sanitation Program. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/783781468044120966/impact-evaluation-of-a-large-scale-rural-sanitation-project-in-indonesia>
- Carter, Richard Charles. 2017. “Can and Should Sanitation and Hygiene Programmes be Expected to Achieve Health Impacts?” *Waterlines* 36 (1): 92–103. <https://practicalactionpublishing.com/article/2806/can-and-should-sanitation-and-hygiene-programmes-be-expected-to-achieve-health-impacts>
- The CLTS Knowledge Hub. 2016. “Community-Led Total Sanitation.” <https://archive.ids.ac.uk/clts/country/indonesia.html>

- Cobos Muñoz, Daniel, Paloma Merino Amador, Laura Monzon Llamas, David Martinez Hernandez, and Juana Maria Santos Sancho. 2017. “Decentralization of Health Systems in Low and Middle Income Countries: A Systematic Review.” *International Journal of Public Health* 62 (2): 219–229. <https://doi.org/10.1007/s00038-016-0872-2>
- Crocker, Jonny, Darren Saywell, and Jamie Bartram. 2017. “Sustainability of Community-led Total Sanitation Outcomes: Evidence from Ethiopia and Ghana.” *International Journal of Hygiene and Environmental Health* 220 (3): 551–557. <https://doi.org/10.1016/j.ijheh.2017.02.011>
- CWIS. n.d. CWIS Service Framework. <https://cwiscities.com/#:~:text=Citywide%20Inclusive%20Sanitation%20%28CWIS%29%20is%20a%20public%20service,of%20Responsibility%2C%20Accountability%2C%20and%20Resource%20Planning%20and%20Management.>
- Davis, Isobel. 2016. “Gender & Community-Led Total Sanitation: CLTS Engagement, Outcomes and Empowerment in Malagasy Communities.” Water Supply and Sanitation Collaborative Council (WSSCC). <https://www.wsscc.org/sites/default/files/migrated/2016/12/Gender-and-Community-Led-Total-Sanitation-CLTS-engagement-outcomes-and-empowerment-in-Malagasy-communities.pdf>
- de Albuquerque, Catarina. 2014. “Handbook on Realizing the Human Rights to Water and Sanitation.” The Office of the High Commissioner for Human Rights (OHCHR). Retrieved October 3, 2022, from <https://www.ohchr.org/en/special-procedures/sr-water-and-sanitation/handbook-realizing-human-rights-water-and-sanitation>
- Delaire, Caroline, Joyce Kisiangani, Kara Stuart, Prince Antwi-Agyei, Ranjiv Khush, and Rachel Peletz. 2022. “Can Open-Defecation Free (ODF) Communities be Sustained? A Cross-Sectional Study in Rural Ghana.” *PLoS ONE* 17 (1): e0261674. <https://doi.org/10.1371/journal.pone.0261674>
- Dhenkanal District Administration. 2020. “District-level FSM Plan for Dhenkanal.”
- England, Patrick, Cecilia Adyero, Bashir Hangi, Mujuni Kitimbo Jimmy, and Emmerly Patrice Mbaha. 2017. “Local Governance and Sanitation: Eight Lessons from Community-Led Total Sanitation at Scale Through Local Governments in Uganda.” WSSCC Global Sanitation Fund. <https://www.ircwash.org/resources/local-governance-and-sanitation-eight-lessons-community-led-total-sanitation-scale-through>
- ESAWAS (Eastern and Southern Africa Water and Sanitation) Regulators Association. 2022. “The Water Supply and Sanitation Regulatory Landscape Across Africa: Continent-Wide Synthesis Report.” https://esawas.org/repository/Esawas_Report_2022.pdf
- Evans, Barbara, Carolien van der Voorden, and Andy Peal. 2009. “Public Funding for Sanitation: The Many Faces of Sanitation Subsidies.” <https://www.ircwash.org/sites/default/files/Evans-2009-Public.pdf>
- Federal Democratic Republic of Ethiopia. 2006. “National Hygiene and ‘On-Site’ Sanitation Protocol.” Ministry of Health. <https://documents1.worldbank.org/curated/en/723921468029350843/pdf/721440WP0Box370SanitationProtocolAF.pdf>
- . 2012. “CLTSH Verification and Certification Protocol.” Ministry of Health. https://archive.ids.ac.uk/clts/sites/communityledtotalsanitation.org/files/Verification_Certification_Protocol_Ethiopia.pdf

- Gambrill, Martin, Rebecca J. Gilsdorf, and Nandita Kotwal. 2020. “Citywide Inclusive Sanitation—Business as Unusual: Shifting the Paradigm by Shifting Minds.” *Frontiers in Environmental Science* 7 (201): 1–10. <https://doi.org/10.3389/fenvs.2019.00201>
- Gibson, Jim, Kathy Eales, and Chris Nsubuga-Mugga. 2018. “Reviewing Sanitation in Uganda to Reach Sustainable Development Goals.” World Bank. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/396641528891986677/reviewing-sanitation-in-uganda-to-reach-sustainable-development-goals>
- Gounden, Teddy, and Nick Alcock. 2017. “Sustainable FSM Service through Integrated Use of Resources and Innovative Technologies: A Case Study of the eThekweni Municipality (Durban) South Africa.” https://www.eawag.ch/fileadmin/Domain1/Abteilungen/sandec/schwerpunkte/sesp/ConCad/Resource_Package/06_FSM_Innovation_Case_Studies/11_fsm_innovation_use_durban.pdf
- Government of Ghana. 2010a. “Checklist for ODF Verification and Certification.” Ministry of Local Government and Rural Development, Environmental Health and Sanitation Directorate, National CLTS Task Force. https://archive.ids.ac.uk/clts/sites/communityledtotalsanitation.org/files/ODF_checklist_Ghana.pdf
- Government of India. 2018. “Guidelines for Swachh Bharat Mission (Gramin).” Ministry of Drinking Water and Sanitation. [https://jalshakti-ddws.gov.in/sites/default/files/SBM\(G\)_Guidelines.pdf](https://jalshakti-ddws.gov.in/sites/default/files/SBM(G)_Guidelines.pdf)
- Government of Nepal. 2011. “Sanitation and Hygiene Master Plan.” <https://www.ircwash.org/resources/sanitation-and-hygiene-master-plan>
- . 2017. “Nepal Water Supply, Sanitation and Hygiene Sector Development Plan (2016 – 2030).” Ministry of Water Supply and Sanitation Sector Efficiency Improvement Unit (SEIU).
- Government of Sierra Leone. 2012. “National Guidelines for Verification and Certification of ODF Status: Sierra Leone.” <https://archive.ids.ac.uk/clts/resource/national-guidelines-verification-and-certification-odf-status-sierra-leone.html>
- Government of the Republic of Malawi. 2018. “National Sanitation and Hygiene Strategy: 2018-2024.” Ministry of Health and Population. https://baseflowmw.org/download/sanitation_national_policy_malawi_2006/#
- Government of the Republic of Zambia. 2018. “2018 Zambia Open Defecation Free Strategy.” Ministry of Water Development, Sanitation and Environmental Protection.
- . 2019a. “National Rural Water Supply and Sanitation Programme (NRWSSP) 2019 – 2030.” Republic of Zambia.
- Hanchett, Suzanne. 2016. “Sanitation in Bangladesh: Revolution, Evolution, and New Challenges.” In *Sustainable Sanitation for All: Experiences, Challenges, and Innovations*, edited by Petra Bongartz, Naomi Vernon, and John Fox, 31–52. Rugby, UK: Practical Action Publishing. <https://sanitationlearninghub.org/resource/sanitation-in-bangladesh-revolution-evolution-and-new-challenges-2/>
- Heierli, Urs, and Jaime Frias. 2007. “One Fly is Deadlier Than 100 Tigers: Total Sanitation as a Business and Community Action in Bangladesh and Elsewhere.” Swiss Agency for Development and Cooperation (SDC). <https://www.ircwash.org/sites/default/files/Heierli-2007-One.pdf>

- Hickling, Sophie. 2019. “Frontiers of CLTS: Innovations and Insights—Tackling Slippage.” IDS. <https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/14711>
- House, Sarah, Sue Cavill, and Suzanne Ferron. 2017. “Equality and Non-Discrimination (EQND) in Sanitation Programmes at Scale (Part I of 2)” IDS. <https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/13181>
- Hueso, Andrés. 2017. “Engaging in City-Wide Sanitation: Implications from ‘A Tale of Clean Cities.’” WaterAid. https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/Engaging_in_city_wide_sanitation_implications_from_a_tale_of_clean_cities.pdf
- iDE. 2016. “Market Segmentation: A More Effective Approach to Balance Subsidies and Private Sector Engagement.” https://cdn-ms.ideglobal.org/www/documents/washmarkets/iDE-TR_BD_Segmentation.pdf?mtime=20190114121243
- . 2019. “Reaching the Poorest with Sanitation Through Targeted Subsidies.” https://www.waterforwomenfund.org/en/resources/en/resourcesGeneral/news/1909iDE-TR_Targeted_Subsidies.pdf
- Jenkins, Marion W., and Steven Sugden. 2006. “Rethinking Sanitation: Lessons and Innovation for Sustainability and Success in the New Millennium.” United Nations Development Programme (UNDP). <https://hdr.undp.org/system/files/documents/jenkinsandsugdenpdf.pdf>
- Jerneck, Matilda, Carolien van der Voorden, and Clara Rudholm. 2016. “Sanitation and Hygiene Behaviour Change at Scale: Understanding Slippage.” Water Supply and Sanitation Collaborative Council (WSSCC). https://archive.ids.ac.uk/clts/sites/communityledtotalsanitation.org/files/Understanding_Slippage_Reflections_Paper_WSSCC.pdf
- Jones, Hazel, Wales Singini, Rochelle Holm, and S. White. 2016. “CLTS Plus: Making CLTS Ever More Inclusive.” 39th WEDC International Conference, Kumasi, Ghana, 2016. https://archive.ids.ac.uk/clts/sites/communityledtotalsanitation.org/files/Jones_Making_CLTS_ever_more_inclusive.pdf
- Kabarole District Council. 2018. “Kabarole District WASH Master Plan 2018-2030: Safe Water Sanitation and Hygiene for All.” https://fr.ircwash.org/sites/default/files/084-20191oeganda_master_plan_def_new_web1.pdf
- Kabarole District Local Government. 2018. “Kabarole District WASH Master Plan 2018-2030 – Summary.” https://www.ircwash.org/sites/default/files/kabarole_masterplan_summary.pdf
- Kampala Capital City Authority. 2019. “Kampala City-Wide Inclusive Sanitation: Gender Integration Action Plan.” <https://www.kcca.go.ug/media/docs/CWIS%20Kampala%20Action%20Plan%2011-20-2019.pdf>
- Kar, Kamal, and Robert Chambers. 2008. “Handbook on Community-Led Total Sanitation.” IDS and Plan International UK. https://plan-international.org/uploads/2022/01/2008_handbook_on_community_led_total_sanitation_en.pdf
- Kasri, Rahmi, Deviariandy Setiawan, Nyoman Oka, Emily Rand, and Susanna Smets. 2016. “Building Rural Sanitation Capacity Nationwide in Indonesia.” World Bank Group and Water and Sanitation Program (WSP). <https://documents1.worldbank.org/curated/en/554551474376833132/pdf/108376-BRI-PUBLIC-Rural-Sanitation-LN-0815.pdf>

- Keesiga, Diana. 2018. “Kamwenge District Investment Plan for Water, Sanitation and Hygiene.” Water for People Uganda and The Republic of Uganda. https://www.washagendaforchange.org/wp-content/uploads/2020/04/district_investment_planning_in_kamwenge_-_uganda_-_june_2018.pdf
- Khan, Shane M., Robert E. S. Bain, Karsten Lunze, Turgay Unalan, Bo Beshanski-Pedersen, Tom Slaymaker, Richard Johnston, and Attila Hancioglu. 2017. “Optimizing Household Survey Methods to Monitor the Sustainable Development Goals Targets 6.1 and 6.2 on Drinking Water, Sanitation and Hygiene: A Mixed-Methods Field-Test in Belize.” *PLoS ONE*, 12 (12): e0189089. <https://doi.org/10.1371/journal.pone.0189089>
- Kolsky, Pete, Lisa Fleming, and Jamie Bartram. 2019. “Models of Unsafe Return of Excreta in Four Countries.” The Water Institute at the University of North Carolina. https://www.researchgate.net/publication/344617317_October_1_2019_Final_Models_of_Unsafe_Return_of_Excreta_in_Four_Countries
- Mitchell, Cynthia, Kumi Abey Suriya, and Katie Ross. 2016. “Making Pathogen Hazards Visible: A New Heuristic to Improve Sanitation Investment Efficacy.” *Waterlines* 35 (2): 163–181. <https://practicalactionpublishing.com/article/2784/making-pathogen-hazards-visible-a-new-heuristic-to-improve-sanitation-investment-efficacy>
- Mukherjee, Nilanjana. 2009. “Total Sanitation and Sanitation Marketing Project: Indonesia Country Update June 2009—Learning at Scale.” WSP. <https://documents1.worldbank.org/curated/en/954521468258863262/pdf/715240BRI0Box30C001earning0at0scale.pdf>
- Musyoki, Samuel Musembi. 2016. “Roles and Responsibilities for Post-ODF Engagement: Building an Enabling Institutional Environment for CLTS Sustainability.” In *Sustainable Sanitation for All: Experiences, Challenges, and Innovations*, edited by Petra Bongartz, Naomi Vernon, and John Fox, 167–180. Rugby, UK: Practical Action Publishing. <https://sanitationlearninghub.org/resource/roles-and-responsibilities-for-post-odf-engagement-building-an-enabling-institutional-environment-for-clts-sustainability/>
- Myers, Jamie, and Michael Gnilo, eds. 2017. “Supporting the Poorest and Most Vulnerable in CLTS Programmes (Learning Paper).” CLTS Knowledge Hub and UNICEF. https://archive.ids.ac.uk/clts/sites/communityledtotalsanitation.org/files/Supporting_the_Poorest_and_Most_Vulnerable.pdf
- Nepal Administrative Staff College. 2019. “Manual on Gender Equality and Social Inclusion and Gender Responsive Budgeting.” UN Women. <https://asiapacific.unwomen.org/en/digital-library/publications/2019/07/manual-on-gender-equality-and-social-inclusion-and-gender-responsive-budgeting>
- Narayan, Abishek Sankara, Sara J. Marks, Regula Meierhofer, Linda Strande, Elizabeth Tilley, Christian Zurbrugg, and Christoph Lüthi. 2021. “Advancements in and Integration of Water, Sanitation, and Solid Waste for Low- and Middle-Income Countries.” *Annual Review of Environment and Resources* 46 (1): 193–219. <https://doi.org/10.1146/annurev-environ-030620-042304>
- Northover, Henry, Shin Kue Ryu, and Timothy Brewer. 2016. “Achieving Total Sanitation and Hygiene Coverage within a Generation – Lessons from East Asia.” WaterAid. https://washmatters.wateraid.org/sites/g/files/jkxooof256/files/Achieving_total_sanitation_and_hygiene_coverage_within_a_generation_lessons_from_East_Asia_0.pdf

- Pedi, Danielle Christina, Phyrum Kov, and Susanna Smets. 2012. "Sanitation Marketing Lessons from Cambodia: A Market-Based Approach to Delivering Sanitation." WSP. <https://documents1.worldbank.org/curated/en/21111468015069201/pdf/734130WSP0Box30elivering0Sanitation.pdf>
- Plan International. 2014. "Village Act Plan: Implications for STBM Implementation."
- . 2020. "Policy Brief: The Mainstreaming of Gender Equality and Social Inclusion (GESI) into Sanitasi Total Berbasis Masyarakat (STBM)." https://www.waterforwomenfund.org/en/learning-and-resources/resources/KL/PLANINDO_WFW004_Mainstreaming-of-GESI-into-STBM-Policy-brief-.pdf
- Ravenscroft, P., Z. H. Mahmud, M. Shafiqul Islam, A. K. M. Z. Hosain, A. Zahid, G. C. Saha, A. H. M. Zulfiquar Ali, et al. 2017. "The Public Health Significance of Latrines Discharging to Groundwater Used for Drinking." *Water Research* 124, 192–201. <https://doi.org/10.1016/j.watres.2017.07.049>
- Republic of Indonesia. 2013. "Guidance Book on Verification of Community Based Total Sanitation." Directorate of Environmental Health, General Directorate of Diseases Control and Environmental Health, and Ministry of Health. https://archive.ids.ac.uk/clts/sites/communityledtotalsanitation.org/files/STBM_Verification_Guide_line.pdf
- Republic of Kenya. 2014. "Protocol for Implementing CLTS in Kenya." Ministry of Health.
- . 2019. "Kenya Countywide Inclusive Sanitation Strategic Planning: Guidance Note." <https://thedocs.worldbank.org/en/doc/438201595953197693-0090022020/original/C.KenyaCountywideInclusiveSanitationPlanningGuidanceNote.pdf>
- Republic of the Philippines. 2019. "Guidelines on the Implementation of the Philippine Approach to Sustainable Sanitation (PhATSS)." Department of Health. https://doh.gov.ph/sites/default/files/health_programs/Administrative%20Order%20No.%202019-0054%20%28Guidelines%20in%20the%20Implementation%20of%20Philippine%20Approach%20to%20Sustainable%20Sanitation%20%28PhATSS%29%20%29.pdf
- Republic of Uganda. 2015. "Second National Development Plan (NDPII) 2015/16–2019/20." <http://npa.go.ug/wp-content/uploads/NDPII-Final.pdf>
- Robertson, B. 2019. "Estimating the Economic Benefits of Market-Based Sanitation Programs." WaterSHED.
- Robiarto, Amin, Effentrif Sofyan, Deviarandy Setiawan, Alan Malina, and Emily Rand. 2014. "Scaling Up Indonesia's Rural Sanitation Mobile Monitoring System Nationally." The World Bank Group and WSP. <https://library.net/document/q7wmdo3o-scaling-indonesia-s-rural-sanitation-mobile-monitoring-nationally.html>
- Robinson, Andy. 2005a. "Indonesia National Program for Community Water Supply and Sanitation Services: Improving Hygiene and Sanitation Behavior and Services." World Bank. <https://library.net/document/yj7170vk-indonesia-national-community-sanitation-services-improving-sanitation-behavior.html>
- . 2005b. "Lessons Learned from Bangladesh, India, and Pakistan: Scaling-Up Rural Sanitation in South Asia." WSP. <https://documents1.worldbank.org/curated/en/897911468258577481/pdf/348730SA0SANITATI0NI20STUDY1PRESS.pdf>

- . 2011. “Enabling Environment Endline Assessment: Indonesia.” WSP. <https://openknowledge.worldbank.org/server/api/core/bitstreams/40aec3d8-cb9f-5641-bbae-9c8ac65d378c/content>
- . 2012. “Enabling Environment Endline Assessment: Himachal Pradesh and Madhya Pradesh, India.” WSP. <https://studylib.net/doc/18383199/enabling-environment-endline-assessment--himachal-pradesh>
- . 2021. “Desk Review: Rural Sanitation and Hygiene in Kenya.” UNICE Kenya.
- . 2022. “Rural Sanitation and Hygiene Protocol.” Republic of Kenya. Ministry of Health.
- Robinson, Andy, and Ajay Paul. 2000. “Case Study: Developing Private Sector Supply Chains to Deliver Rural Water Technology: The Growth of Private Sector Participation in Rural Water Supply and Sanitation in Bangladesh.” WSP. <https://www.ircwash.org/sites/default/files/WSP-2000-Growth.pdf>
- Robinson, Andy, and Andy Peal. 2020. “Safely Managed Sanitation Services in the Global Sanitation Fund.” WSSCC and The Sanitation and Hygiene Fund. <https://www.wsscc.org/sites/default/files/2020-11/SSMS%20Publication%20WEB.pdf>
- Robinson, Andy, and Mike Gnilo. 2016. “Promoting Choice: Smart Finance for Rural Sanitation Development.” In *Sustainable Sanitation for All: Experiences, Challenges, and Innovations*, edited by Petra Bongartz, Naomi Vernon, and John Fox, 225–243. Rugby, UK: Practical Action Publishing. <https://sanitationlearninghub.org/resource/promoting-choice-smart-finance-for-rural-sanitation-development/>
- Roose, Sharon, Tom Rankin, and Sue Cavill. 2015. “Breaking the Next Taboo: Menstrual Hygiene within CLTS.” *Frontiers of CLTS: Innovations and Insights* 6, Brighton: IDS. <https://sanitationlearninghub.org/resource/breaking-the-next-taboo-menstrual-hygiene-within-clts/>
- Rosensweig, Fred, and Derko Kopitopoulos. 2010. “Building the Capacity of Local Government to Scale Up Community-Led Total Sanitation and Sanitation Marketing in Rural Areas.” WSP. <https://documents1.worldbank.org/curated/en/945641468161097410/pdf/569500WP0WSP1B101public10BOX353742B.pdf>
- Schrecongost, Alyse, Danielle Pedi, Jan Willem Rosenboom, Roshan Shrestha, and Radu Ban. 2020. “Citywide Inclusive Sanitation: A Public Service Approach for Reaching the Urban Sanitation SDGs.” *Frontiers in Environmental Science* 8 (19): 1–8. <https://doi.org/10.3389/fenvs.2020.00019>
- Secretariat of National Sanitation and Hygiene Coordination Committee. 2020. “Open Defecation Free Nepal: Narration of the Journey.” Sewerage Management and Environmental Sanitation Section, Department of Water Supply and Sewerage Management, and Ministry of Water Supply. <https://nepalindata.com/resource/OPEN-DEFECATION-FREE-NEPAL-NARRATION-OF-THE-JOURNEY-2020/>
- Shah, Rachel, Kate Fogelberg, and Harold Lockwood. 2021. “Agenda for Change Systems Strengthening Research: WaterSHED Case Study.” WaterSHED. <https://washagendaforchange.org/wp-content/uploads/2022/01/WaterSHED-case-study-FINAL.pdf>
- SNV. 2018. “Estimating Safely Managed Sanitation in Nepal: SNV Sustainable Sanitation and Hygiene for All (SSH4A).” The Hague: SNV Programme Learning Brief.

- . 2019a. “Delivering Professional WASH Services at Scale.” <https://snv.org/assets/explore/download/wash-sector-brochure-web.pdf#:~:text=SNV%E2%80%99s%20WASH%20approach%20supports%20local%20and%20national%20government,sector%2C%20civil%20society%20organisations%20%28CSOs%29%20and%20service%20users>
- . 2019b. “The Missing Middle: Rural Growth Centres in Area-wide Sanitation.” <https://interactive.snv.org/snv-rural-sanitation-publications#263955>
- . 2019c. “Sustainable Sanitation and Hygiene for All (SSH4A): Performance Monitoring Framework—Part I. Introduction and Impact Indicators.” <https://snv.org/assets/explore/download/2019-1-impact-indicators-ssh4a-performance-monitoring-review.pdf>
- . 2020. “Gender Equality and Social Inclusion (GESI) in WASH.” Fact Sheet. <https://snv.org/assets/explore/download/gesi-wash-factsheet-eng.pdf>
- Stephenson, Mary-Ann. 2018. “A Guide to Gender-Responsive Budgeting.” Oxfam and Women’s Budget Group. <https://policy-practice.oxfam.org/resources/rough-guide-to-gender-responsive-budgeting-620429/>
- Stuart, Kara, Rachel Peletz, Jeff Albert, Ranjiv Khush, and Caroline Delaire. 2021. “Where Does CLTS Work Best? Quantifying Predictors of CLTS Performance in Four Countries.” *Environmental Science and Technology* 55 (6): 4064–4076. <https://doi.org/10.1021/acs.est.0c05733>
- SWA (Sanitation and Water for All). 2018. “SWA Briefing Series: Leaving No One Behind.” <https://www.sanitationandwaterforall.org/sites/default/files/2020-02/SWA%20Briefing%20Papers%201%20-%20Leaving%20No%20One%20Behind.pdf>
- . n.d.a. “Building Blocks.” Retrieved October 2, 2022, from <https://www.sanitationandwaterforall.org/about/our-work/priority-areas/building-blocks>
- . n.d.b. “The Collaborative Behaviours.” Retrieved October 3, 2022, from <https://www.sanitationandwaterforall.org/about/our-work/priority-areas/collaborative-behaviours>
- Tillett, Will, and Stef Smits. 2017. “A District Level Roadmap for Universal Access to Sustainable WASH Services.” Briefing Note. Agenda for Change. https://www.ircwash.org/sites/default/files/a4c_roadmap_for_universal_access_nov2017_draft.pdf
- Trancón, Delia Sánchez, Julia Boulenouar, and Will Tillett. 2021. “A District Level Roadmap for Universal Access to Sustainable Sanitation Services.” Briefing Note. Agenda for Change. https://www.ircwash.org/sites/default/files/agenda-for-change-district-level-roadmap-for-universal-access-to-sustainable-sanitation-services_apr-2021-eng.pdf
- UN (United Nations). 2014. “The Human Right to Water and Sanitation.” Last updated May 29, 2014. Retrieved October 3, 2022, from https://www.un.org/waterforlifedecade/human_right_to_water.shtml
- . n.d.a. “Goal 6: Ensure Availability and Sustainable Management of Water and Sanitation for All.” Department of Economic and Social Affairs. Retrieved October 3, 2022, from <https://sdgs.un.org/goals/goal6>

- . n.d.b. “The 17 Goals.” Department of Economic and Social Affairs. Retrieved October 2, 2022, from <https://sdgs.un.org/goals>
- UN Water. 2021. “Summary Progress Update 2021: SDG 6—Water and Sanitation for All.” <https://www.unwater.org/publications/summary-progress-update-2021-sdg-6-water-and-sanitation-all>
- . n.d. “SDG 6 Global Acceleration Framework.” <https://www.unwater.org/our-work/sdg-6-global-acceleration-framework>
- UNICEF (United Nations Children’s Fund). 2016a. “Making Nigeria Open-Defecation-Free by 2025: A National Road Map.” Federal Government of Nigeria and UNICEF. <https://www.unicef.org/nigeria/reports/making-nigeria-open-defecation-free-2025-national-road-map#:~:text=Making%20Nigeria%20open%20defecation%20free%20by%202025%3A%20A.open%20defecation%2C%20estimated%20at%20over%2046%20million%20people.>
- . 2016b. “Strengthening Enabling Environment for Water, Sanitation and Hygiene.” Guidance Note. <https://agora.unicef.org/pluginfile.php/69724/course/summary/WASH%20Guidance%20Note%20Draft%20Updated%20LR.pdf>
- . 2016c. “The UNICEF Health Systems Strengthening Approach.” <https://www.unicef.org/media/119741/file/UNICEF%20Health-Systems-Strengthening-Approach.pdf>
- . 2018b. “UNICEF’s Game Plan to End Open Defecation.” <https://www.unicef.org/media/91316/file/Game-plan-to-end-open-defecation-2018.pdf>
- . 2019. “Regional Meeting Report: On Mobilizing Political Will and Mutual Accountability for Sanitation and Water for All.” <https://www.unicef.org/eap/media/4616/file/water%20and%20sanitation.pdf>
- . 2020a. “National Economic Impact Evaluation of the Swachh Bharat Mission.” <https://evaluationreports.unicef.org/GetDocument?fileID=13644>
- . 2020b. “Sanitation Market Analysis: Summary Report: Nepal.” <https://www.unicef.org/nepal/media/10986/file/Sanitation%20Market%20Analysis:%20Nepal.pdf>
- . 2021. “Guidance on Market-Based Sanitation.” Updated in 2021. <https://www.unicef.org/documents/guidance-market-based-sanitation>
- . 2022. “The UNICEF Game Plan to Reach Safely Managed Sanitation 2022–2030.” <https://www.unicef.org/documents/sanitation-game-plan>
- . 2018. “Core Questions on Water, Sanitation and Hygiene for Household Surveys: 2018 Update.” <https://washdata.org/monitoring/methods/core-questions>
- . 2019. “Progress on Household Drinking Water, Sanitation and Hygiene: 2000-2017.” <https://data.unicef.org/resources/progress-drinking-water-sanitation-hygiene-2019/>
- . 2020. “UNICEF-WHO JMP - Indonesia - Sanitation.” Retrieved October 3, 2022, from <https://washdata.org/data/household#!/table?geo0=country&geo1=IDN>
- . 2021. “Progress on Household Drinking Water, Sanitation and Hygiene, 2000-2020: Five Years Into the SDGs.” <https://data.unicef.org/resources/progress-on-household-drinking-water-sanitation-and-hygiene-2000-2020/>

- USAID (United States Agency for International Development). 2018a. “An Examination of CLTS’s Contributions Toward Universal Sanitation” https://www.ircwash.org/sites/default/files/an_examination_of_ctss_contributions_toward_universal_sanitation.pdf
- . 2018b. “Scaling Market-Based Sanitation: Desk Review on Market-Based Rural Sanitation Development Programs.” Washington, DC., USAID Water, Sanitation, and Hygiene Partnerships and Learning for Sustainability (WASHPaLS) Project. <https://www.globalwaters.org/resources/assets/washpals/rural-mbs-desk-review>
- . 2020. “Technical Brief 2: Rural Sanitation.” https://pdf.usaid.gov/pdf_docs/PA00VPF7.pdf
- . 2021a. “Encouraging Handwashing in Schools Through Behavioral Nudges.” https://www.idinsight.org/wp-content/uploads/2021/06/HandwashingPolicyBrief_20Sept_logochange.pdf
- . 2021b. “Mid-Term Performance Evaluation of Madagascar Rural Access to New Opportunities in Water, Sanitation, and Hygiene (RANO WASH) Activity.” https://www.globalwaters.org/sites/default/files/rano_wash_evaluation_final_report_w_annexes_oct2021_accessibility_adobe.pdf
- . 2021c. “Understanding Impacts of a Targeted Toilet Subsidy in Ghana: Final Report.” https://www.globalwaters.org/sites/default/files/washpals_understanding_impacts_of_a_targeted_toilet_subsidy_in_ghana_dec_2021.pdf
- . 2022. “Toward a Hygienic Environment for Infants and Young Children: Limiting Early Exposures to Support Long-Term Health and Well-Being.” <https://www.globalwaters.org/resources/assets/toward-hygienic-environment-infants-and-young-children-limiting-early-exposures>
- Venkataramanan, Vidya. 2017. “Review of Rural Sanitation Approaches: Final Report.” UNC Water Institute. https://www.ircwash.org/sites/default/files/review_of_rural_sanitation_approaches_-_final_report.pdf
- Venkataramanan, Vidya, Jonny Crocker, Andrew Karon, and Jamie Bartram. 2018. “Community-Led Total Sanitation: A Mixed-Methods Systematic Review of Evidence and Its Quality.” *Environmental Health Perspectives* 126 (2): 026001. <https://doi.org/10.1289/EHP1965>
- Viswanathan, Radhika. 2017. “Sanitation Coverage, Usage and Health: A Rapid Investigation” IDS and WaterAid India. https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/15467/Sanitation_Coverage_Usage_Health.pdf?sequence=1&isAllowed=y
- Wamera, Elizabeth. 2016. “Who is Managing the Post-ODF Process in the Community? A Case Study of Nambale Sub-County in Western Kenya.” In *Sustainable Sanitation for All: Experiences, Challenges, and Innovations*, edited by Petra Bongartz, Naomi Vernon, and John Fox, 81–195. Rugby UK: Practical Action Publishing. <https://sanitationlearninghub.org/resource/who-is-managing-the-post-odf-process-in-the-community-a-case-study-of-nambale-sub-county-in-western-kenya/>
- WASH Alliance. n.d. “Sustainability.” WASH Alliance International. Retrieved October 2, 2022, from <https://wash-alliance.org/our-approach/sustainability/>
- WaterAid. 2018. “Toolkit: Understanding and Addressing Equality, Non-Discrimination and Inclusion in Water, Sanitation and Hygiene (WASH) Work.” <https://washmatters.wateraid.org/publications/equality-non-discrimination-and-inclusion-toolkit>

- . 2019. “Guidance on Programming for Rural Sanitation.” Plan International and UNICEF. <https://www.fsnnetwork.org/resource/guidance-programming-rural-sanitation>
- Water for Women. 2022. “Partnerships for Transformation: Guidance for WASH and Rights Holder Organisations.” <https://www.waterforwomenfund.org/en/news/partnerships-for-transformation-guidance-for-wash-and-rights-holder-organisations.aspx>
- White, Sian, Hannah Kuper, Ambumulire Itimu-Phiri, Rochelle Holm, and Adam Biran. 2016. “A Qualitative Study of Barriers to Accessing Water, Sanitation and Hygiene for Disabled People in Malawi.” *PLoS ONE* 11 (5): e0155043. <https://doi.org/10.1371/journal.pone.0155043>
- WHO (World Health Organization). 2017. “Diarrhoeal Disease.” Retrieved October 3, 2022, from <https://www.who.int/en/news-room/fact-sheets/detail/diarrhoeal-disease>
- . 2018. “Guidelines on Sanitation and Health.” <https://www.who.int/publications/i/item/9789241514705>
- . 2019. Nepal: Sanitation Policy and Planning Framework Case Study for Discussion. <https://www.who.int/publications/m/item/sanitation-policy-and-planning-framework-case-studies-for-discussion>
- . 2022. “Strong Systems and Sound Investments: Evidence on and Key Insights into Accelerating Progress on Sanitation, Drinking-Water and Hygiene. UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) 2022 Report.” [https://glaas.who.int/glaas/un-water-global-analysis-and-assessment-of-sanitation-and-drinking-water-\(glaas\)-2022-report](https://glaas.who.int/glaas/un-water-global-analysis-and-assessment-of-sanitation-and-drinking-water-(glaas)-2022-report)
- Wolf, Jennyfer, Sydney Hubbard, Michael Brauer, Argaw Ambelu, Benjamin F. Arnold, Robert Bain, Valerie Bauza, et al. 2022. “Effectiveness of Interventions to Improve Drinking Water, Sanitation, and Handwashing with Soap on Risk of Diarrhoeal Disease in Children in Low-Income and Middle-Income Settings: A Systematic Review and Meta-Analysis.” *The Lancet* 400 (10345): 48–59. [https://doi.org/10.1016/S0140-6736\(22\)00937-0](https://doi.org/10.1016/S0140-6736(22)00937-0)
- World Bank. 2013a. “Additional Financing to the Third Water Supply and Sanitation for Low Income Communities (Community Based Water Supply/PAMSIMAS II) Project.” <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/355431468267035971/indonesia-additional-financing-to-the-third-water-supply-and-sanitation-for-low-income-communities-project-pamsimas>
- . 2013b. “Tapping the Market: Opportunities for Domestic Investments in Sanitation for the Poor.” World Bank WSP and International Finance Corporation. https://www.susana.org/_resources/documents/default/2-1859-dpsp-sanitation-report-conference-edition-wsp-august-2013.pdf
- . 2015. “PAMSIMAS: Responding to the Water and Sanitation Challenges in Rural Indonesia.” <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/938961468195535278/pamsimas-responding-to-the-water-and-sanitation-challenges-in-rural-indonesia>
- . 2016. “Scaling Up Rural Sanitation and Hygiene in Indonesia.” <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/796661468253523036/scaling-up-rural-sanitation-and-hygiene-in-indonesia>

- . 2019. “Delivering Rural Sanitation Programs at Scale, with Equity and Sustainability: Rising up to the Sanitation Ambition.” <https://thedocs.worldbank.org/en/doc/959161570454050835-0090022019/original/RuralSanitationCalltoAction10072019.pdf>
- . 2022. “Sanitation.” Last updated October 6, 2022. Retrieved October 2, 2022, from <https://www.worldbank.org/en/topic/sanitation#1>
- WSP. 2008. “The eThekweni Declaration and AfricaSan Action Plan.” <https://www.ircwash.org/sites/default/files/WSPAF-2008-eThekweni.pdf>
- . 2009. “Total Sanitation and Sanitation Marketing Project: Indonesia Country Update June 2009—Learning at Scale.” <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/954521468258863262/total-sanitation-and-sanitation-marketing-project-indonesia-country-update-june-2009-learning-at-scale>
- WSSCC. 2016a. “2016 Progress Report: Championing Sustainable Sanitation and Hygiene for All.” Global Sanitation Fund. <https://www.wsscc.org/sites/default/files/migrated/2017/06/GSF-Progress-Report-2016-WSSCC.pdf>
- . 2016b. “Catalytic Programming for Scale and Sustainability: Conversations, Reflections and Lessons from the 2016 Global Sanitation Fund Learning Event.” Global Sanitation Fund. https://archive.ids.ac.uk/clts/sites/communityledtotalsanitation.org/files/Catalytic_programming_for_scale_and_sustainability_GSF.pdf
- . 2019a. “Equality and Non-Discrimination Handbook for CLTS Facilitators.” <https://www.wsscc.org/sites/default/files/uploads/2019/09/EQND-handbook-web.pdf>
- . 2019b. “Sprinting the Last Mile: Nepal’s Sanitation Campaign in the Terai.” Global Sanitation Fund. <https://www.wsscc.org/sites/default/files/migrated/2020/01/WSSCC-Nepal-Case-Study.pdf>

ANNEX A. AREA-WIDE APPROACHES BY DEVELOPMENT PARTNERS

TABLE 6: CHARACTERISTICS OF AREA-WIDE APPROACHES IN PRACTICE						
ORGANIZATION	GEOGRAPHY	SUMMARY OF PROGRAM	INTERVENTIONS USED (IF KNOWN)	AREA-WIDE SANITATION (AWS) KEY PRINCIPLES		
				SCALE	ROLE OF LOCAL GOVERNMENT	EQUITY AND UNIVERSAL COVERAGE
SNV (1, 2)	Africa/Asia	<p>Sustainable Sanitation and Hygiene for All (SSH4A) (2008–2018)</p> <p>SSH4A worked to create and improve water, sanitation, and hygiene (WASH) systems and address the demand, supply, behavioral, and governance bottlenecks to AWS coverage and service delivery.</p>	Community-led total sanitation (CLTS), capacity building, behavior change communication (BCC), supply chain development	National, provincial, county, district	Strengthened WASH governance over enabling sanitation enterprises and markets through direct partnership and training with national and local governments across interventions (e.g., CLTS, subsidies, market-based sanitation); focused on sanitation in households, public spaces, and as area-wide (provincial, county, district) service provision.	Individual programs modified designs of sanitation products and interventions to best fit local contexts. Local masons altered latrine designs to suit local climate and soil conditions of program areas. These programs facilitated governments and partner organizations to include a GESI lens in sanitation programming, including those marginalized because of gender, age, income, and disability. They also conducted vulnerability mapping in program areas and aided local governments to incorporate findings into programming.
World Bank (1, 2, 3, 4)	<p>Sub-Saharan Africa: Tanzania</p> <p>South Asia: India</p> <p>Southeast Asia: Indonesia</p>	<p>Total Sanitation and Sanitation Marketing (TSSM) (2007–2011)</p> <p>TSSM worked with national and local governments to strengthen sanitation markets and spur demand for sanitation products to increase hygienic sanitation access and improved health.</p>	CLTS, capacity building, sanitation marketing	National, provincial, district	Worked to strengthen the enabling environment on both a national and local level through capacity building and policy development to carry out CLTS and sanitation marketing interventions at the district level; assisted district governments with implementation planning, monitoring and evaluation (M&E), and budgeting to promote sustainability post-implementation through local government leadership.	Program implementation was scaled to work within entire districts on an area-wide level and cover as broad a population as possible. It also integrated culturally relevant information, education, and communication approaches (e.g., including street theater) with CLTS techniques to fit the local cultural context.

TABLE 6: CHARACTERISTICS OF AREA-WIDE APPROACHES IN PRACTICE						
ORGANIZATION	GEOGRAPHY	SUMMARY OF PROGRAM	INTERVENTIONS USED (IF KNOWN)	AREA-WIDE SANITATION (AWS) KEY PRINCIPLES		
				SCALE	ROLE OF LOCAL GOVERNMENT	EQUITY AND UNIVERSAL COVERAGE
World Bank (1, 2, 3)	Southeast Asia: Indonesia	<p>National Program for Community Water Supply and Sanitation Services (NPCWSSS [Third Water and Sanitation for Low Income Communities Project (PAMSIMAS)]) - Phase I (2005–2012)</p> <p>NPCWSSS - Phase II (NPCWSSS II) (2013–2015)</p> <p>NPCWSSS trained community-level organizations and governments in implementing WASH programming, waste management techniques, and knowledge sharing.</p>	CLTS, capacity building, hygiene interventions	Community, district	<p>Provided capacity development and other trainings to local government officials to prepare for community-level program implementation and sanitation marketing; utilized district and village incentives such as grants as community incentives that rewarded villages and districts who met open defecation free (ODF) targets.</p>	<p>Aided local governments in developing and implementing context-specific, tailored interventions to meet local needs; aimed to support the Government of Indonesia in reaching universal coverage nationally by 2019.</p>

REFERENCES FOR ANNEX A

SNV

- SNV. 2019a. “Delivering Professional WASH Services at Scale.”
<https://snv.org/assets/explore/download/wash-sector-brochure-web.pdf#:~:text=SNV%E2%80%99s%20WASH%20approach%20supports%20local%20and%20national%20government,sector%2C%20civil%20society%20organisations%20%28CSOs%29%20and%20service%20users>
- . 2019c. “Sustainable Sanitation and Hygiene for All (SSH4A): Performance Monitoring Framework—Part I. Introduction and Impact Indicators.”
<https://snv.org/assets/explore/download/2019-1-impact-indicators-ssh4a-performance-monitoring-review.pdf>
- . 2020. “Gender Equality and Social Inclusion (GESI) in WASH.” Fact Sheet.
<https://snv.org/assets/explore/download/gesi-wash-factsheet-eng.pdf>

World Bank (TSSM)

- Cameron, Lisa, Manisha Shah, and Susan Olivia. 2013. “Impact Evaluation of a Large-Scale Rural Sanitation Project in Indonesia.” The World Bank Sustainable Development Network Water and Sanitation Program. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/783781468044120966/impact-evaluation-of-a-large-scale-rural-sanitation-project-in-indonesia>
- Robinson, Andy. 2011. “Enabling Environment Endline Assessment: Indonesia.” WSP.
<https://openknowledge.worldbank.org/server/api/core/bitstreams/40aec3d8-cb9f-5641-bbae-9c8ac65d378c/content>
- . 2012. “Enabling Environment Endline Assessment: Himachal Pradesh and Madhya Pradesh, India.” WSP. <https://studylib.net/doc/18383199/enabling-environment-endline-assessment--himachal-pradesh>
- Rosensweig, Fred, and Derko Kopitopoulos. 2010. “Building the Capacity of Local Government to Scale Up Community-Led Total Sanitation and Sanitation Marketing in Rural Areas.” WSP.
<https://documents1.worldbank.org/curated/en/945641468161097410/pdf/569500WP0WSP1B101public10BOX353742B.pdf>
- WSP. 2009. “Total Sanitation and Sanitation Marketing Project: Indonesia Country Update June 2009—Learning at Scale.” <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/954521468258863262/total-sanitation-and-sanitation-marketing-project-indonesia-country-update-june-2009-learning-at-scale>

World Bank (NPCWSSS)

- AusAid. 2012. “Third Water and Sanitation for Low Income Communities Project (PAMSIMAS) and the Water Supply and Sanitation Policy Formulation and Action Planning (WASPOLA) Facility.”
- Robinson, Andy. 2005a. “Indonesia National Program for Community Water Supply and Sanitation Services: Improving Hygiene and Sanitation Behavior and Services.” World Bank.
<https://library.net/document/yj7170vk-indonesia-national-community-sanitation-services-improving-sanitation-behavior.html>

- World Bank. 2013a. “Additional Financing to the Third Water Supply and Sanitation for Low Income Communities (Community Based Water Supply/PAMSIMAS II) Project.”
<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/355431468267035971/indonesia-additional-financing-to-the-third-water-supply-and-sanitation-for-low-income-communities-project-pamsimas>
- . 2015. “PAMSIMAS: Responding to the Water and Sanitation Challenges in Rural Indonesia.”
<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/938961468195535278/pamsimas-responding-to-the-water-and-sanitation-challenges-in-rural-indonesia>

ANNEX B. AREA-WIDE APPROACHES BY GOVERNMENTS

TABLE 7: NATIONAL AND LOCAL GOVERNMENT AREA-WIDE PROGRAMMING						
COUNTRY	PROGRAM	SUMMARY AND GOALS/TARGETS (ODF, BASIC SANITATION, SAFELY MANAGED SANITATION SERVICES)	INTERVENTIONS USED (IF KNOWN)	AWS KEY PRINCIPLES		
				SCALE	ROLE OF LOCAL GOVERNMENT	EQUITY AND UNIVERSAL COVERAGE
Nepal (1, 2)	Sanitation and Hygiene Master Plan (2011–2015)	National plan that supported the effective planning, budgeting, mobilization of human resources, implementation, M&E, and follow-up hygiene and sanitation programming to reach national sanitation targets. Goal: Universal toilet coverage by 2017 (ODF declared in 2019).	CLTS, capacity building, targeted subsidies (for poor and disadvantaged groups)	National, regional, district	Local provincial and district governments lead and implement behavior change programming district-wide, with stakeholder alignment through district committees, regional and district awards systems for meeting targets, and national funding allocations for local budgeting for sanitation programming.	Implemented targeted subsidies for hard-to-reach populations to ensure universal access in all districts; coordination with other government departments (Ministry of Women, Children, and Social Welfare) to integrate equity considerations into sanitation policies.
India (1)	Swachh Bharat Mission Grameen (SBMG) (2014–2025)	A whole-of-government initiative to increase sanitation coverage by empowering state- and district-level governments to implement large-scale behavior change and context specific sanitation programming. Goal: Eliminate open defecation nationwide by October 2, 2019.	CLTS; information, education, and communication campaigns; capacity development of sanitation suppliers and businesses	National, regional, district	States and districts are responsible for designing a district-wide approach to implementing village- and community-level behavior change interventions toward universal coverage; significant funding from the national government to state sanitation programming. Clear rules and responsibilities for district governments/positions to carry out area-wide programming.	Local governments prioritize vulnerable groups such as women, children, lower castes, faiths and ethnicities, older people, etc., through inclusive planning of WASH services to include provisions for menstrual hygiene management (MHM) and “accessible” sanitary facilities and consultation with local women’s groups and intentionally identified households with disabled members to tailor latrine construction to their needs.
Indonesia (1, 2, 3, 4, 5)	Sanitasi Total Berbasis Masyarakat (STBM) (2008–Present)	National sanitation campaign that focused on building the capacities of community- and village-level governments to implement sanitation and hygiene programming. Goal: Universal access to basic sanitation by 2019.	CLTS, hygiene interventions, fecal sludge management (FSM), supply side strengthening, enabling environment support	National, provincial, district	District governments implement context-specific programs on an area-wide scale; provide clear monitoring and financing responsibilities throughout levels of government.	Inter-departmental collaboration to improve targeting of hard-to-reach populations (e.g., ultra-poor); external partners have supported designing and integrating gender and equity programming into the STBM framework with government partners.

TABLE 7: NATIONAL AND LOCAL GOVERNMENT AREA-WIDE PROGRAMMING

COUNTRY	PROGRAM	SUMMARY AND GOALS/TARGETS (ODF, BASIC SANITATION, SAFELY MANAGED SANITATION SERVICES)	INTERVENTIONS USED (IF KNOWN)	AWS KEY PRINCIPLES		
				SCALE	ROLE OF LOCAL GOVERNMENT	EQUITY AND UNIVERSAL COVERAGE
Philippines	Philippines Approach to Sustainable Sanitation (PhATSS) (2019–Present)	<p>The national government’s policy that adopted a phased area-wide approach, implemented by local government units (LGUs). Not a lot of programming has used this approach since it was only enacted in 2019.</p> <p>Goal: Zero open defecation status and universal access to safe and adequate sanitary facilities by 2028.</p>	CLTS, sanitation marketing, FSM, WASH communication campaigns	LGU, Barangay	Local coordination bodies on the provincial, municipal/city, and Barangay/LGU level are responsible for implementing PhATSS guidelines through the planning, budgeting, monitoring, and verifying of WASH programming with the support from national agencies. Also responsible for knowledge sharing among LGUs and other stakeholders to support learnings and share best practices.	Targeted assistance to disadvantaged persons/groups is listed as one of the implementation mechanisms of PhATSS, with LGUs required to define and identify disadvantaged persons/groups that need improved sanitation facilities and prioritize those groups in service provision. Unclear if any other concessions are made.
Uganda (1, 2, 3)	<p>Second and Third National Development Plans (NDP II and III) (2015–2020; 2020–2025)</p> <p>Kabarole District WASH Master Plan (2018–2030)</p> <p>Kamwenge District Investment Plan for Water, Sanitation and Hygiene</p>	<p>National development plans that establish WASH-sector priorities and targets to be achieved by 2024/25; district WASH master plan and financing framework that present context-specific targets, tailored interventions, and local budget allocations to localize sustainable development goal (SDG) targets.</p> <p>Goal: Increase improved toilet coverage to 45% by 2025.</p>	CLTS, BCC, sanitation marketing, FSM	District	Districts create, own, and implement district-wide frameworks for WASH programming in line with national priorities, context-specific targets, and the SDGs; inclusive of district-level budget allocations, an intersectoral oversight body, defined roles and responsibilities, and benchmarking at the household level to track sanitation access.	Utilizing a national framework for gender management to promote inclusion of women and girls’ needs in WASH, with local district hygiene plans, including budgetary provisions and a focus on women’s menstrual hygiene services.

TABLE 7: NATIONAL AND LOCAL GOVERNMENT AREA-WIDE PROGRAMMING						
COUNTRY	PROGRAM	SUMMARY AND GOALS/TARGETS (ODF, BASIC SANITATION, SAFELY MANAGED SANITATION SERVICES)	INTERVENTIONS USED (IF KNOWN)	AWS KEY PRINCIPLES		
				SCALE	ROLE OF LOCAL GOVERNMENT	EQUITY AND UNIVERSAL COVERAGE
Kenya	Kenya Rural Sanitation and Hygiene Protocol (2022–Present)	National sanitation protocol for county and sub-county governments to achieve area-wide outcomes through a phased programming approach to reach national sanitation targets by 2030. Goal: All rural communities to achieve G2 status, nationwide ODF, and universal access to improved sanitation by 2030.	CLTS, sanitation marketing, capacity development, targeted subsidies	County, sub-county, ward	County and sub-county political units are responsible for the design, implementation, planning, monitoring, and financing of sanitation programming. Local governments are also responsible for ensuring that programming is equitable and reaching everyone within the area.	During progress toward G1 and G2, ²⁴ sub-county governments are responsible for identifying and reaching vulnerable populations through developing inclusive policy, plans, and targets; allocating budgets toward sanitation programming; and designing context-specific activities for their specific needs.
Zambia (I)	National Rural Water Supply and Sanitation Programme Phase 2 (NRWSSP II) (2019–2030)	National program aimed toward sustaining and building off of progress made from first implementation phase (NRWSSP I) to expand access to improved sanitation in rural areas. Goal: 90% of the population has access to improved sanitation by 2030.	CLTS, BCC, capacity building, sanitation education campaign	National, provincial, district	Provinces to identify and prioritize which behaviors (i.e., open defecation, waste management, etc.) are most prevalent in their respective areas and design interventions on a district level; lays out clear roles and responsibilities for local governments and a plan for national/external funding, as well as the creation of both provincial and district WASH committees to oversee and coordinate sanitation programming.	Local governments have responsibility to ensure sanitation programming is inclusive of marginalized populations, specifically mentioning vulnerable populations, including gender, the chronically ill, and persons with disabilities, but it is unknown how this is practically implemented.
Malawi	National Sanitation and Hygiene Strategy (2018–2024)	National strategy establishing a framework for improving and sustaining sanitation and hygiene service delivery Goal: Access to improved sanitation and hygiene facilities for 29 rural districts, 263	CLTS/CLTS +, BCC, Sanitation Marketing	National, district	District and local government units implement a broad range of behavioral change and demand interventions (e.g., CLTS, sanitation marketing) toward ODF on a district-wide level, with an institutionalized phased sanitation ladder and post-ODF monitoring;	National-level government agencies (i.e., Ministry of Gender, Children, Disability, and Social Welfare Community) responsible for integrating equity in programming with districts to ensure inclusivity; includes provisions for

²⁴ Kenya’s Rural Sanitation and Hygiene Protocol contains a phased approach to sanitation where G1 status is the achievement of ODF status and G2 status is the achievement of safe management of human, infant and young child/children, and animal waste.

TABLE 7: NATIONAL AND LOCAL GOVERNMENT AREA-WIDE PROGRAMMING						
COUNTRY	PROGRAM	SUMMARY AND GOALS/TARGETS (ODF, BASIC SANITATION, SAFELY MANAGED SANITATION SERVICES)	INTERVENTIONS USED (IF KNOWN)	AWS KEY PRINCIPLES		
				SCALE	ROLE OF LOCAL GOVERNMENT	EQUITY AND UNIVERSAL COVERAGE
		traditional authorities, and 38,682 villages by 2024			plans for inter-departmental/sectoral collaboration and established coordination channels between national, district, and local government units.	incorporating MHM activities into all sanitation programming by 2024.

REFERENCES FOR ANNEX B

Nepal

- Government of Nepal. 2011. “Sanitation and Hygiene Master Plan.” <https://www.ircwash.org/resources/sanitation-and-hygiene-master-plan>
- WHO. 2019. Nepal: Sanitation Policy and Planning Framework Case Study for Discussion. <https://www.who.int/publications/m/item/sanitation-policy-and-planning-framework-case-studies-for-discussion>
- WSSCC. 2019b. “Sprinting the Last Mile: Nepal’s Sanitation Campaign in the Terai.” Global Sanitation Fund. <https://www.wsscc.org/sites/default/files/migrated/2020/01/WSSCC-Nepal-Case-Study.pdf>

India

- Government of India. 2018. “Guidelines for Swachh Bharat Mission (Gramin).” Ministry of Drinking Water and Sanitation. [https://jalshakti-ddws.gov.in/sites/default/files/SBM\(G\)_Guidelines.pdf](https://jalshakti-ddws.gov.in/sites/default/files/SBM(G)_Guidelines.pdf)
- UNICEF. 2020a. “National Economic Impact Evaluation of the Swachh Bharat Mission.” <https://evaluationreports.unicef.org/GetDocument?fileID=13644>

Indonesia

- The CLTS Knowledge Hub. 2016. “Community-Led Total Sanitation.” <https://archive.ids.ac.uk/clts/country/indonesia.html>
- Kasri, Rahmi, Deviariandy Setiawan, Nyoman Oka, Emily Rand, and Susanna Smets. 2016. “Building Rural Sanitation Capacity Nationwide in Indonesia.” World Bank Group and Water and Sanitation Program (WSP). <https://documents1.worldbank.org/curated/en/554551474376833132/pdf/108376-BRI-PUBLIC-Rural-Sanitation-LN-0815.pdf>
- Plan International. 2014. “Village Act Plan: Implications for STBM Implementation.”
- . 2020. “Policy Brief: The Mainstreaming of Gender Equality and Social Inclusion (GESI) into Sanitasi Total Berbasis Masyarakat (STBM).” https://www.waterforwomenfund.org/en/learning-and-resources/resources/KL/PLANINDO_WFW004_Mainstreaming-of-GESI-into-STBM-Policy-brief-.pdf
- Robiarto, Amin, Effentrif Sofyan, Deviariandy Setiawan, Alan Malina, and Emily Rand. 2014. “Scaling Up Indonesia’s Rural Sanitation Mobile Monitoring System Nationally.” The World Bank Group and WSP. <https://library.net/document/q7wmdo3o-scaling-indonesia-s-rural-sanitation-mobile-monitoring-nationally.html>
- World Bank. 2016. “Scaling Up Rural Sanitation and Hygiene in Indonesia.” <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/796661468253523036/scaling-up-rural-sanitation-and-hygiene-in-indonesia>

Philippines

- Republic of the Philippines. 2019. “Guidelines on the Implementation of the Philippine Approach to Sustainable Sanitation (PhATSS).” Department of Health. https://doh.gov.ph/sites/default/files/health_programs/Administrative%20Order%20No.%202019-

[0054%20%28Guidelines%20in%20the%20Implementation%20of%20Philippine%20Approach%20to%20Sustainable%20Sanitation%20%28PhATSS%29%20%29.pdf](https://www.ircwash.org/sites/default/files/084-201901oeganda_master_plandef_new_web1.pdf)

Uganda

Kabarole District Council. 2018. “Kabarole District WASH Master Plan 2018-2030: Safe Water Sanitation and Hygiene for All.” https://fr.ircwash.org/sites/default/files/084-201901oeganda_master_plandef_new_web1.pdf

Keesiga, Diana. 2018. “Kamwenge District Investment Plan for Water, Sanitation and Hygiene.” Water for People Uganda and The Republic of Uganda. https://www.washagendaforchange.org/wp-content/uploads/2020/04/district_investment_planning_in_kamwenge_-_uganda_-_june_2018.pdf

Republic of Uganda. 2015. “Second National Development Plan (NDPII) 2015/16–2019/20.” <http://npa.go.ug/wp-content/uploads/NDPII-Final.pdf>

Republic of Uganda. 2020. “Third National Development Plan (NDPIII) 2020/21—2024/25.” <https://www.health.go.ug/cause/third-national-development-plan-ndpiii-2020-21-2024-25/>

Kenya

Robinson, Andy. 2022. “Rural Sanitation and Hygiene Protocol.” Republic of Kenya. Ministry of Health.

Zambia

Government of the Republic of Zambia. 2019a. “National Rural Water Supply and Sanitation Programme (NRWSSP) 2019 – 2030.” Republic of Zambia.

———. 2019b. “Zambia National Water, Sanitation and Hygiene (WASH) Communication Strategy 2019–2030.” Ministry of Water Development, Sanitation and Environmental Protection. <https://docslib.org/doc/6349466/wash-communication-strategy-2019-2030>

Malawi

Government of the Republic of Malawi. 2018. “National Sanitation and Hygiene Strategy: 2018-2024.” Ministry of Health and Population. https://baseflowmw.org/download/sanitation_national_policy_malawi_2006/#

U.S. Agency for International Development
1300 Pennsylvania Avenue, NW
Washington, DC 20523
Tel: (202) 712-0000
Fax: (202) 216-3524
www.usaid.gov